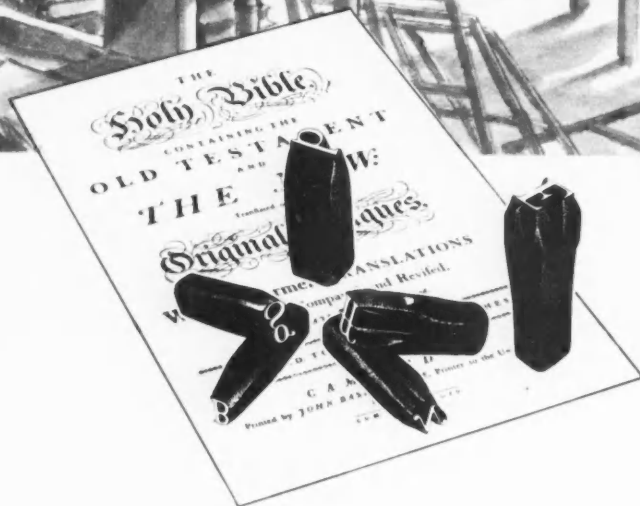


Design

Journal of Industrial Design Vol. 143 November 1960 Price 3s

No. 17 *Type Founder*

At a time when England was lagging behind in typography, John Baskerville (1706-1775) seized the initiative by designing a type face so elegant and distinctive that it astonished and delighted the librarians of Europe.



Seven long years of experimenting with type, ink and paper were to pass before Baskerville could produce a letter that pleased his fastidious eye. His labours were not in vain. Although some may have thought his italic a trifle thin and wiry, the new face had an elegance, freedom and symmetry not found in others — his roman letter, in particular, being open, legible, and full of individuality. To show off the full beauty of his type,

Baskerville selected the finest paper, prepared rich inks; every book was a masterpiece, a gem of typographic art. How surprising, then, that during his lifetime Baskerville's type was not much valued in his own country. Today, the place of Baskerville among the nobler type faces is unchallenged.

*In I.C.I., creative minds are constantly searching for new products and processes,
and for improvements to existing ones.*



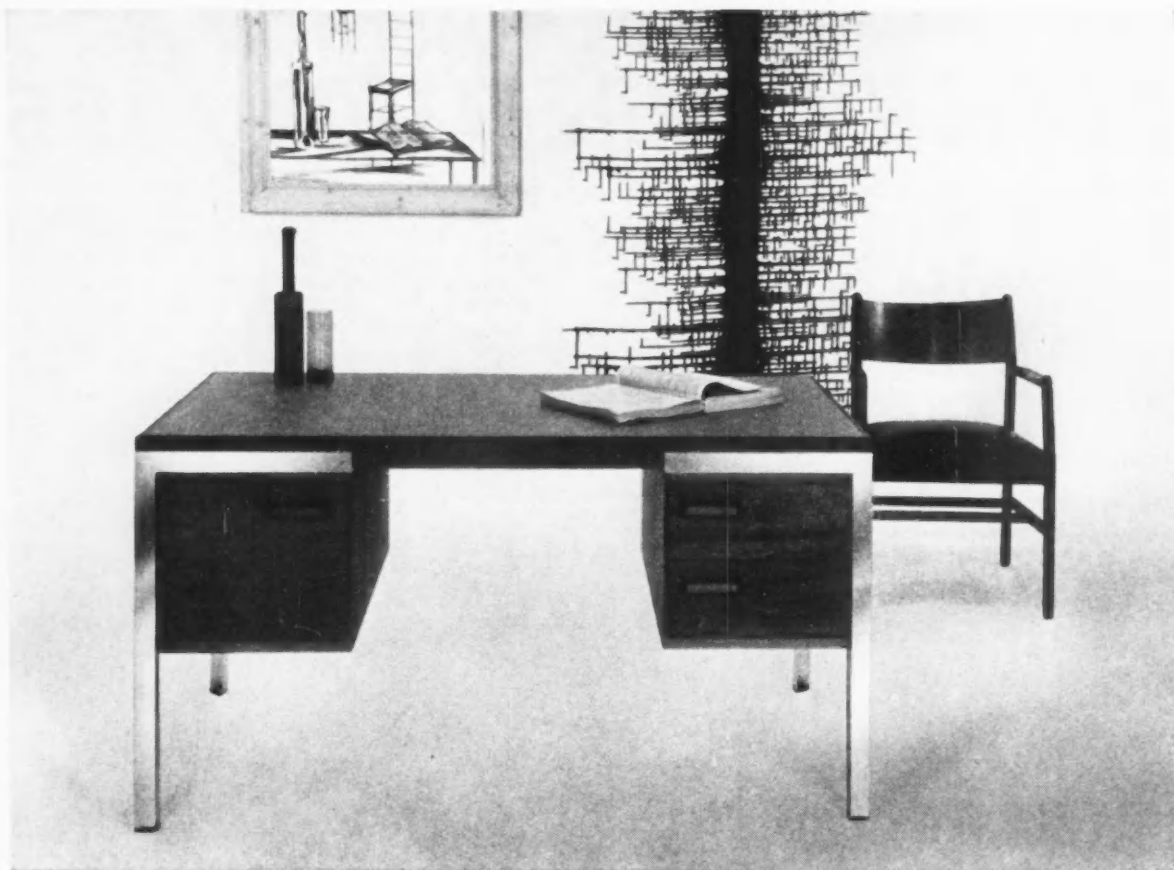
THE AEROPREEN AWARD £500 DESIGN COMPETITION / 1961

Aeropreen Products Limited, manufacturers of high quality polyurethane foams for the furniture industry, announce the institution of an Annual Award, to the value of £500, for the best furniture designs, using Aeropreen flexible foam, submitted by established British industrial designers (age limit 36), and British design students in Technical Colleges and Schools of Art recognised by the Ministry of Education. The objects of the Award are to encourage young designers to create new methods of using Polyether foams and to improve design standards for quantity production furniture. **First prize £300, second prize £150, third prize £50.**

Entries will be judged by Ernest Race, R.D.I., PP.S.I.A., (Chairman), Sir Gordon Russell, C.B.E., M.C., R.D.I., F.S.I.A., Ashley Havinden, O.B.E., R.D.I., PP.S.I.A., PP.A.G.I., F.I.P.A., Edith Blair, Home Editor of 'Woman', F. J. Bristow, President of High Wycombe Furniture Manufacturers' Society and Managing Director, Messrs. Bristow and Townsend Ltd.

Closing date: March 1st, 1961. Entry forms and samples of Aeropreen flexible foams are available from: The Secretary, Aeropreen Award Committee, Aeropreen Products Ltd., Lindsay Avenue, High Wycombe, Bucks.





This is what LM do with ordinary West African Mahogany

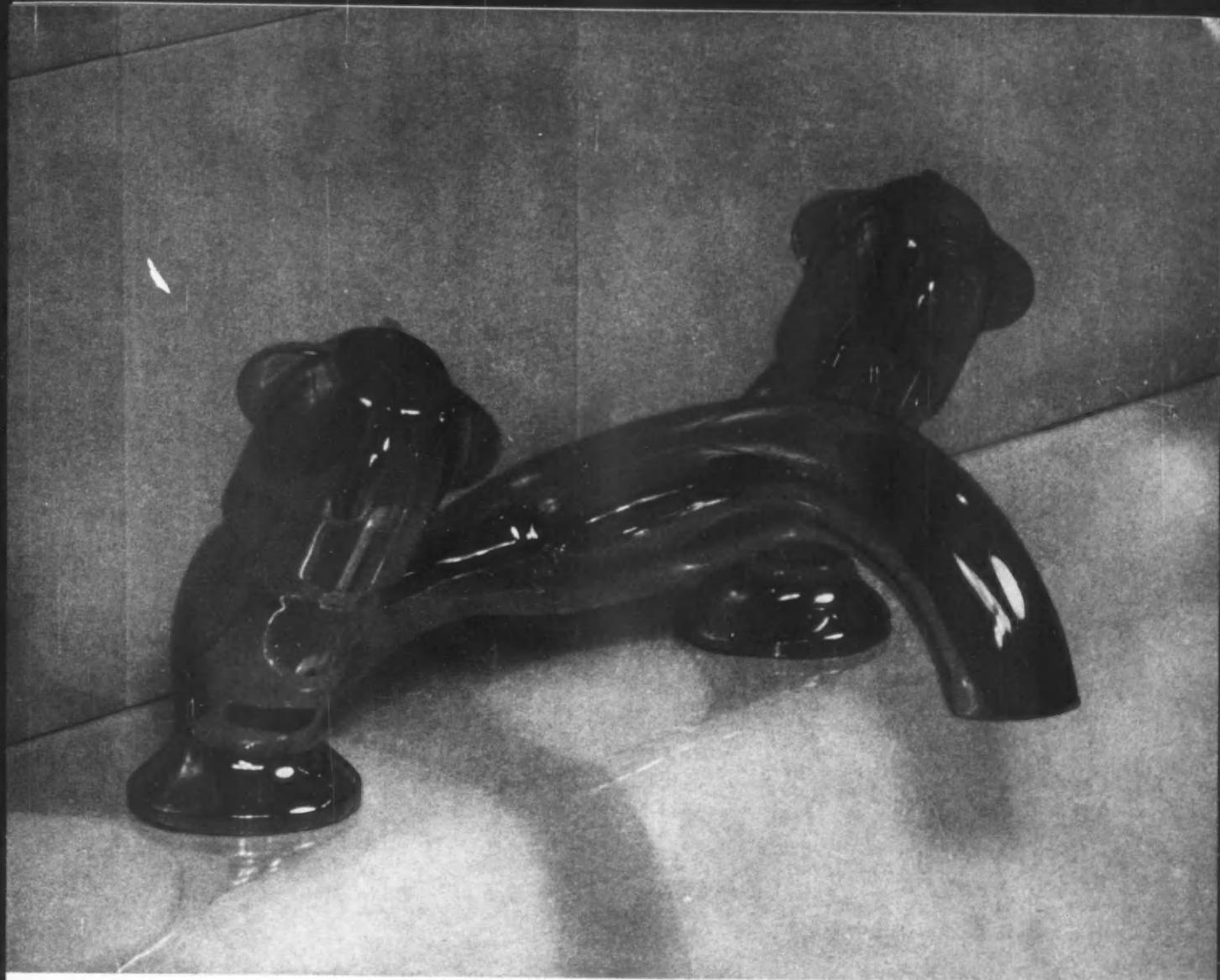
LM's new desks (a versatile family of which this is quite a junior member) are made of perfectly ordinary Utile Mahogany from West Africa. *But*—it is bought in the log, to ensure matching of grain and colour; kiln-dried to $12\frac{1}{2}\%$ moisture content; and kept at controlled humidity until the desk leaves the works. The finish is a special imported Danish oil, which feeds the wood and is easily maintained.

The unorthodox legs are extruded anodised aluminium, with a soft pewter-like lustre. The locks were specially designed for this range. The tops are natural grained hide, leather cloth, or veneer; this one is in pale blue.

The chair? One of nineteen. Utile Mahogany again, but the finish is a cold-catalyzed cellulose lacquer. (The easy way of applying lacquer is to put on a filler first; this causes white marks under scratches. LM do it the better way—several coats of lacquer direct on wood.) The upholstery is rubberized hog's hair on springs, and the cover, to customers' choice, is fastened with three-pronged air-driven staples instead of conventional tacks—much neater and firmer.

LM's catalogue illustrates the whole range. LM Furniture Ltd., 63 Dean Street, London W1, will send you one. Tel : REGent 1848.

LM furniture



Bathroom Fixtures
BY

Shanks

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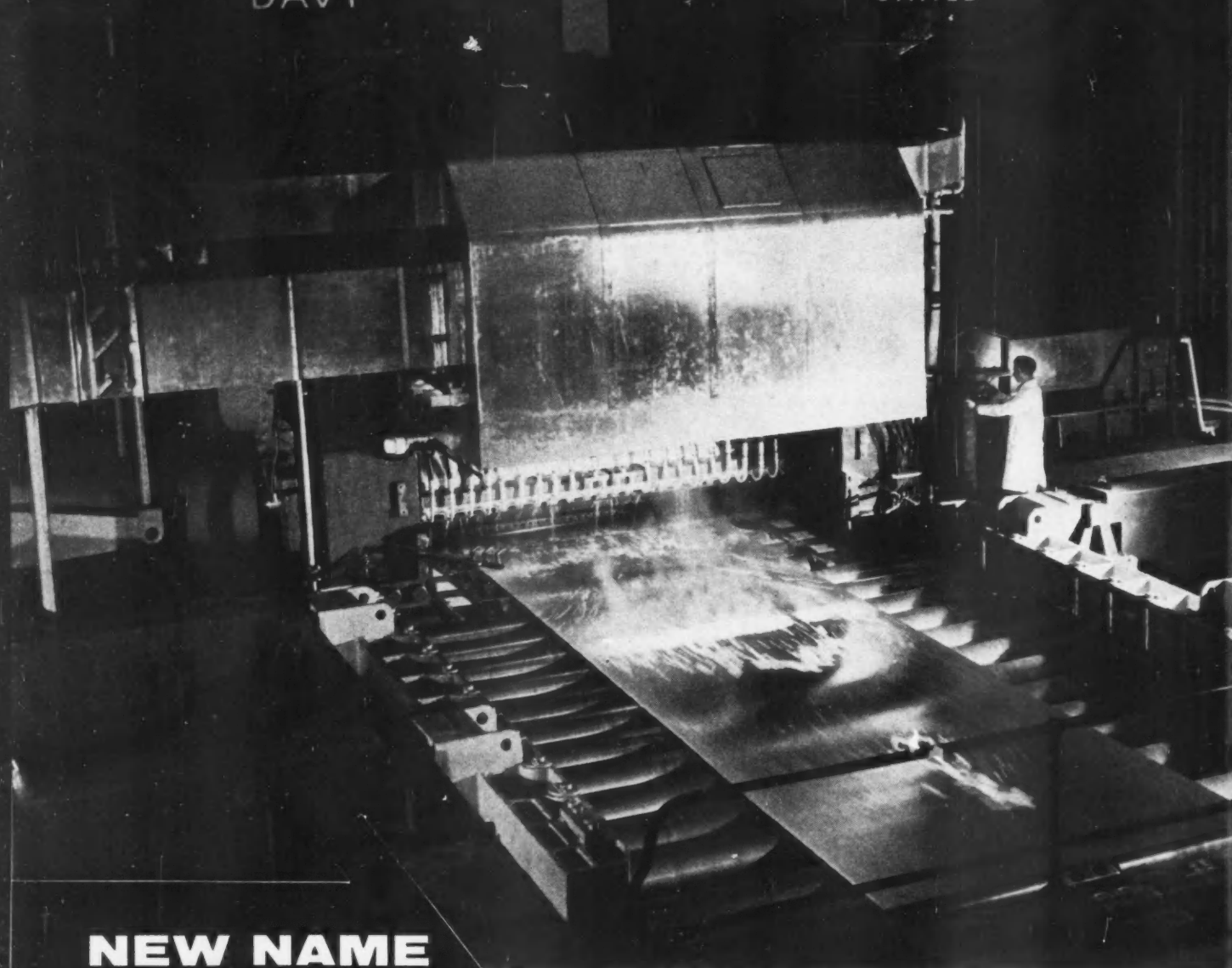
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aluminium rolling mill in Europe



This 8,000 horse-power 144-inch mill, first stage in a 'hot line' one third of a mile long, is the centrepiece of the latest expansion of the continuous strip mill at Rogerstone, Monmouthshire. New equipment and modernisation at a cost of over £7 million makes Rogerstone the largest aluminium rolling mill in Europe, with a nominal capacity of 70,000 tons of sheet and strip products a year, plus a substantial extra capacity for hot-rolled coil and plate.

It demonstrates the determination of Alcan Industries - the new name of Northern Aluminium Company - to maintain their position as leading suppliers of aluminium products to British industry.

Aluminium alloy plate over eleven feet wide can be produced by this big new mill, compared with the maximum width previously available of about seven feet, and this wide plate offers the designer more scope and can save time and money in construction. It is of special significance to the shipbuilding, railway, chemical, petroleum and other engineering industries.

Leadership in equipment is backed by long experience in the application of aluminium, including joining methods. If you use, or might well use, aluminium, for expert advice get in touch with your nearest Alcan Industries (formerly Northern Aluminium) office.

LIMITED

This new name identifies the company more clearly as a member of the Aluminium Limited of Canada enterprise, comprising some fifty companies in all parts of the world. Emphasis is thereby laid on the advantages that the company and its customers enjoy in being able to avail themselves of the Group's extensive research and development resources, and its great fund of experience in the smelting, manufacture and application of aluminium.



TBW/718

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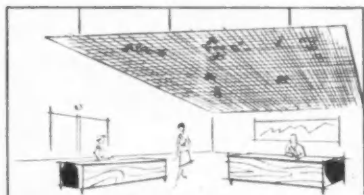
the world's first non-modular suspended ceiling

lightweight sections interlock without visible joints

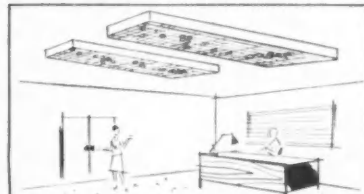
Consider the architectural possibilities of a luminous ceiling material that cuts to any size and shape, that is dimensionally stable, yet so light that it is suspended only by slender wires. This is Infilite. Its light transmission value is one of the highest of any luminous ceiling material, yet brightness control rings ensure remarkably low surface brightness.

Infilite comes in standard 24" x 25" interlocking panels that clip together to form ceiling areas of any size.

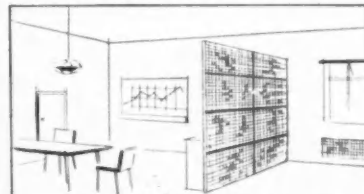
Investigate Infilite—luminous ceiling—room divider—decorative material—and in imaginative hands much more besides.



Infilite weighs so little, it is suspended by slender wires only. No T beams.



Infilite has a high light transmission value yet surface brightness is exceptionally low.



Infilite is versatile and offers numerous design and decorative possibilities.



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G.E.C.
LIGHTING DIVISION

rotaplan

light diffusing space dividers

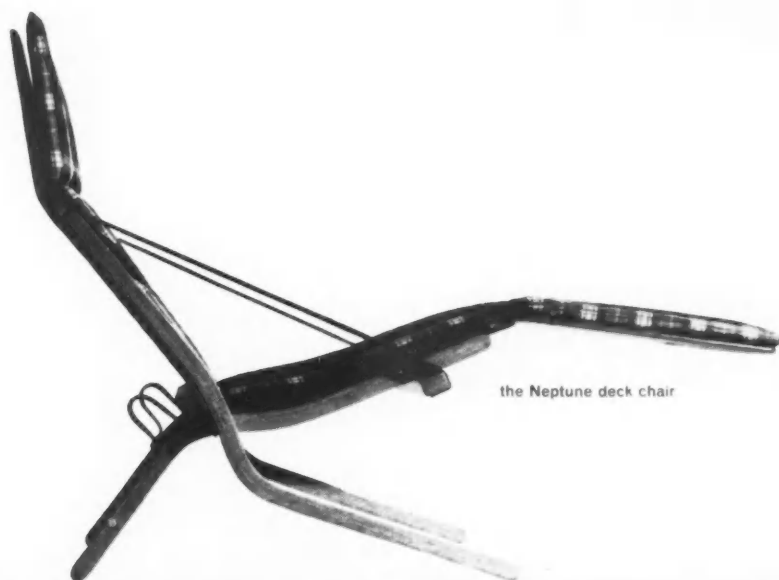
From Rotaflex—makers of exciting lighting comes another brilliant idea—Rotaplan the new light diffusing space divider.

Rotaplan, beautifully designed, is a combination of strong slender shafts which stretch from floor to ceiling and translucent or opaque screens poised between. Rotaplan is simply sprung into position, no other fixing is needed. It is light, strong, easily cleaned, and movable at will and is available in 2 patterns, and a range of wonderful colours. Any number of screens and shafts can be used together in an infinite variety of combinations. Designed by John & Sylvia Reid.

*For further details write to
Architectural Division.*

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the Neptune deck chair

RACE

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R57 settee and easy chair



Tripos chair, footstool and table



Cormorant deck chair

New for the sixties

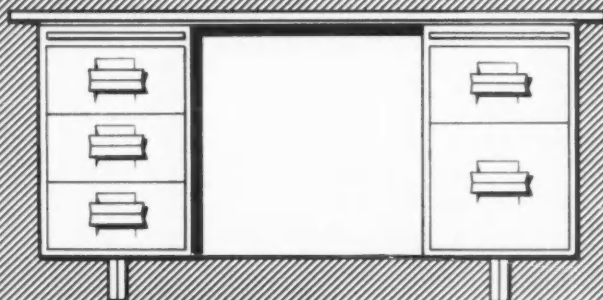
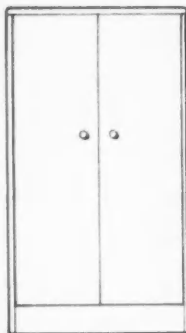
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melamine

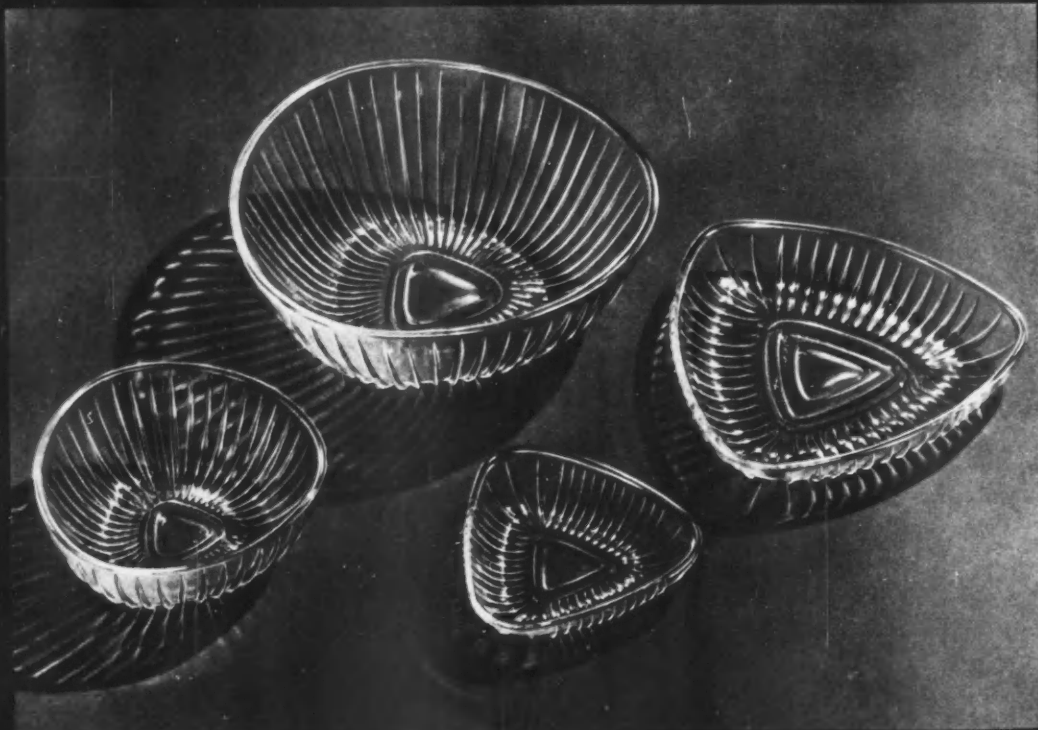


Product design by Ronald E. Brookes FSIA

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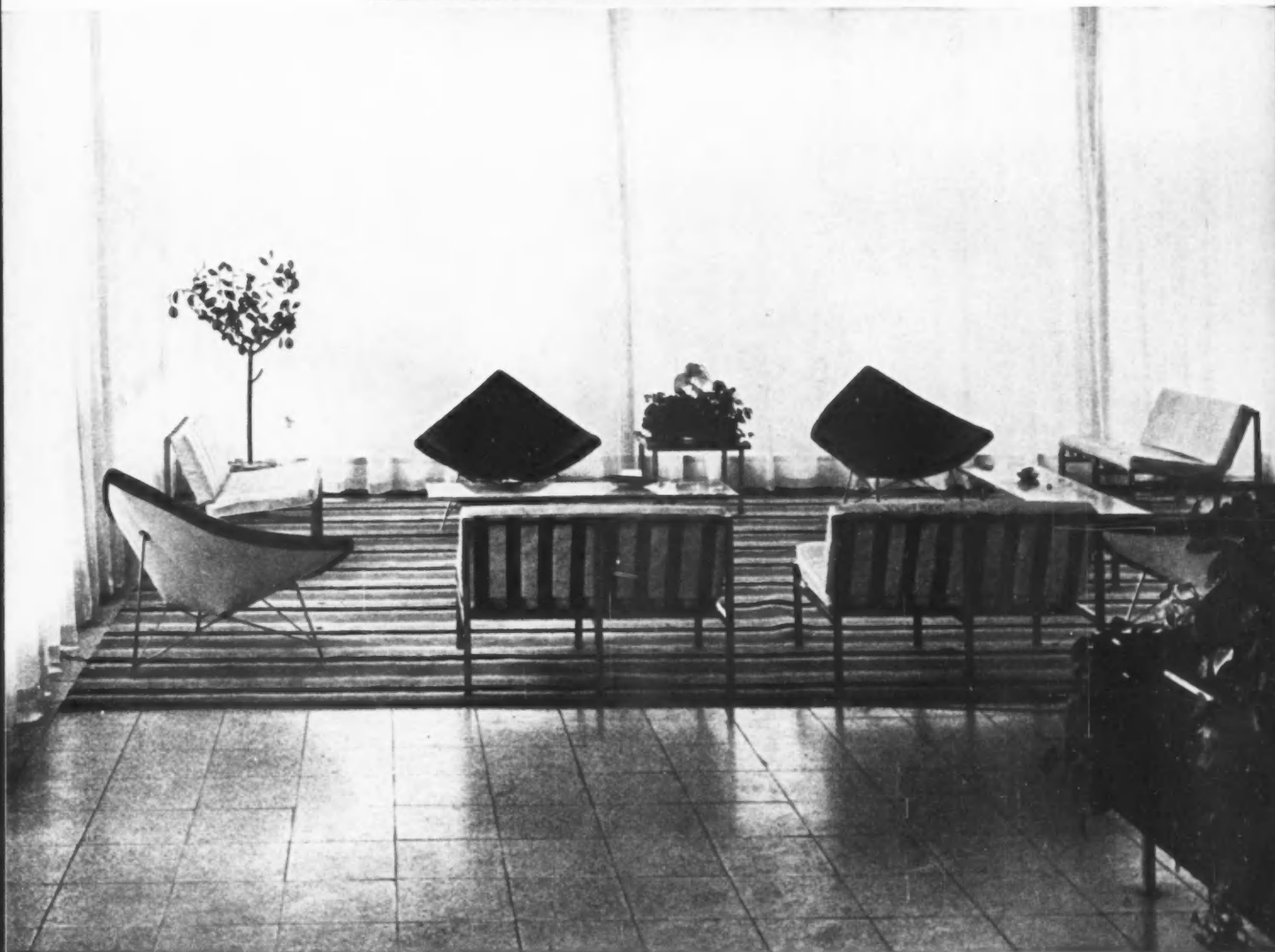
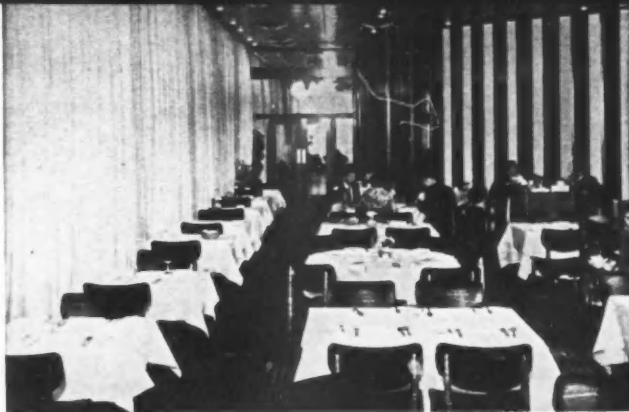
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157



★★★★★★ **IN THE SKYWAY HOTEL**—a whole constellation by Hille. In the main lounge, above, exhilarating Coconut chairs (clip-on upholstery over steel shells with rod bases) are paired with special Gatwick settees. The dining room tables and Albany chairs, top photo, the moulded-back armchairs in the bar, and easy chairs in the bedrooms are all by Hille. In the bedrooms, compact dressing table units and the matching

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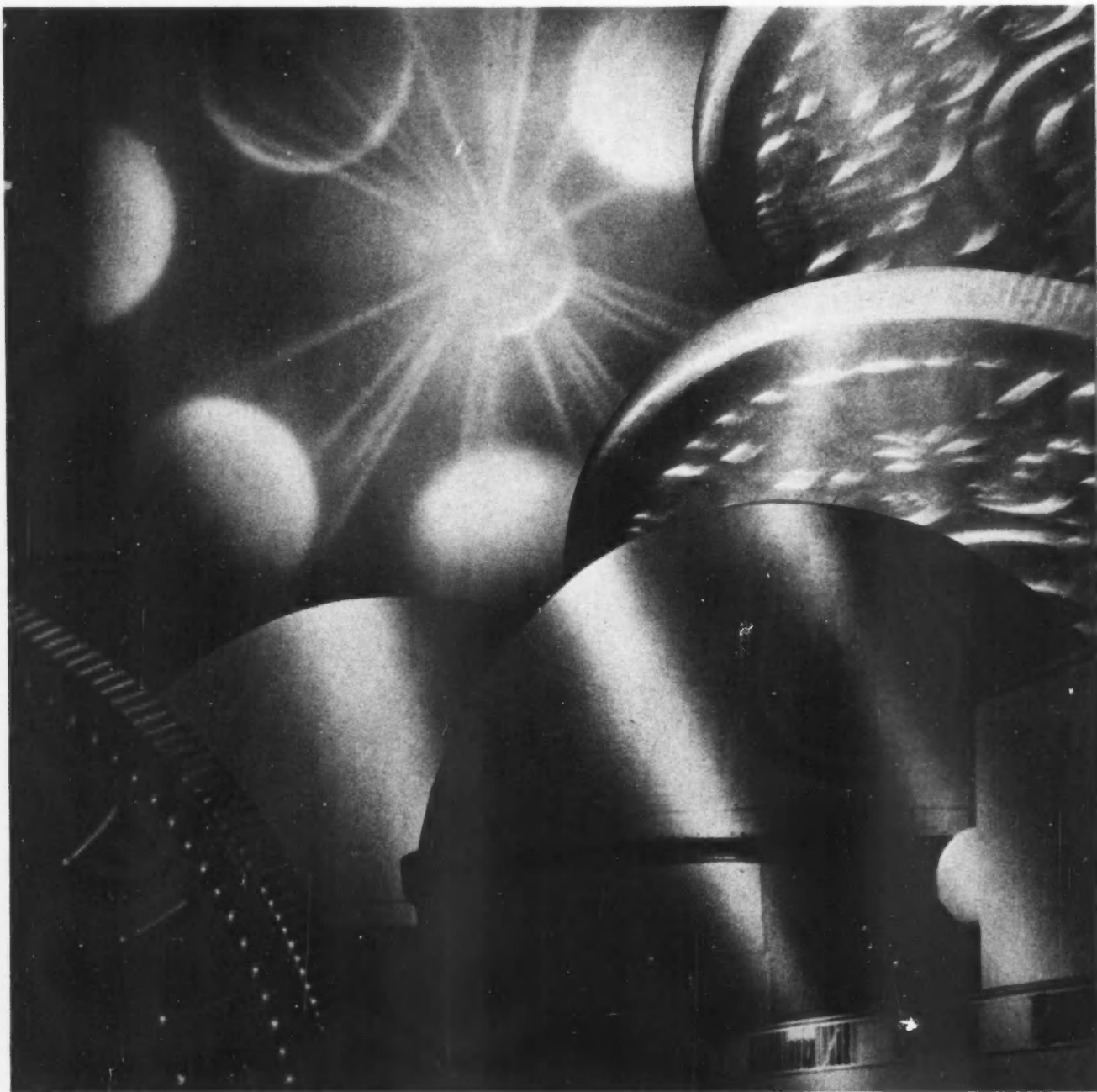
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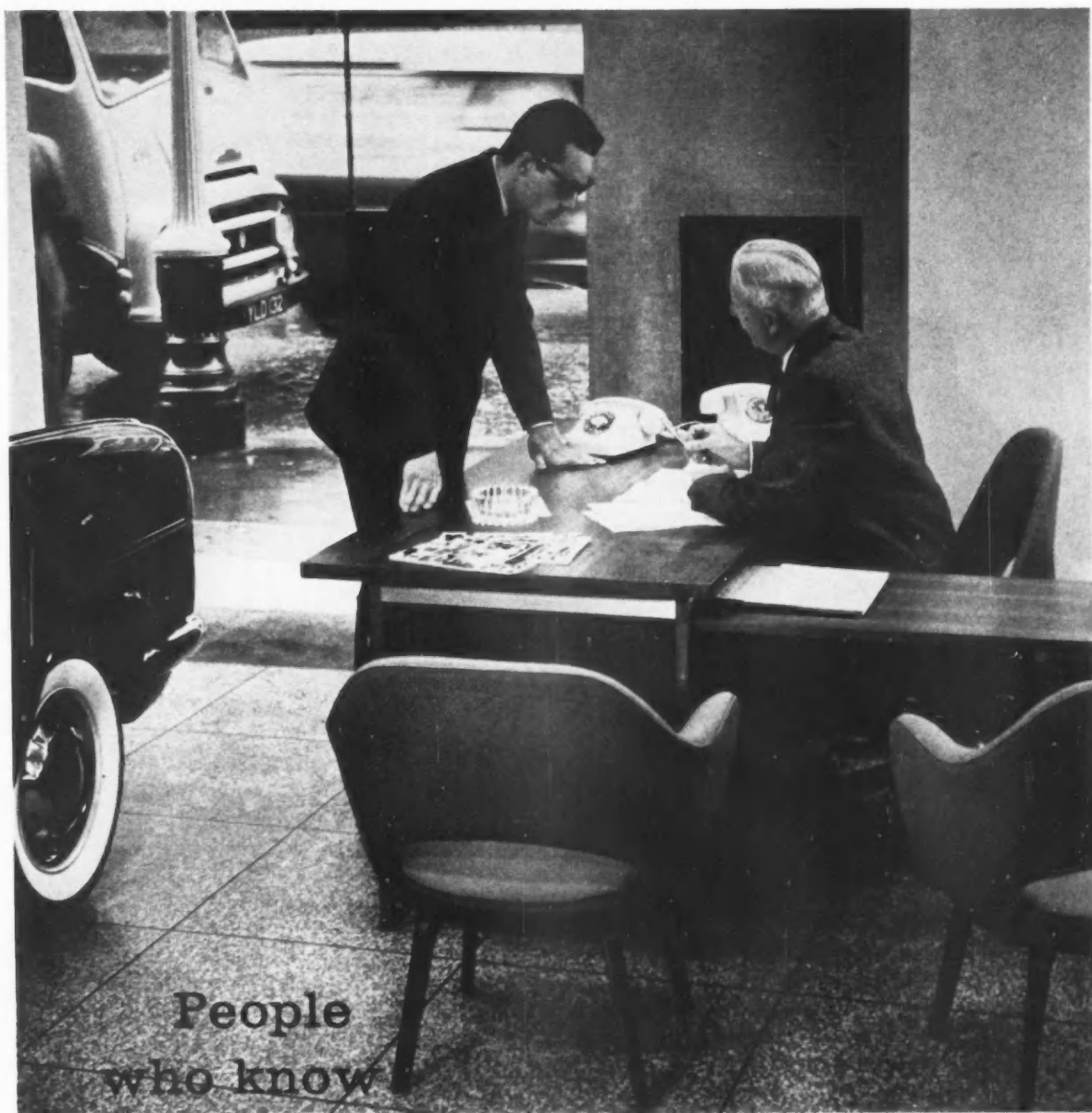
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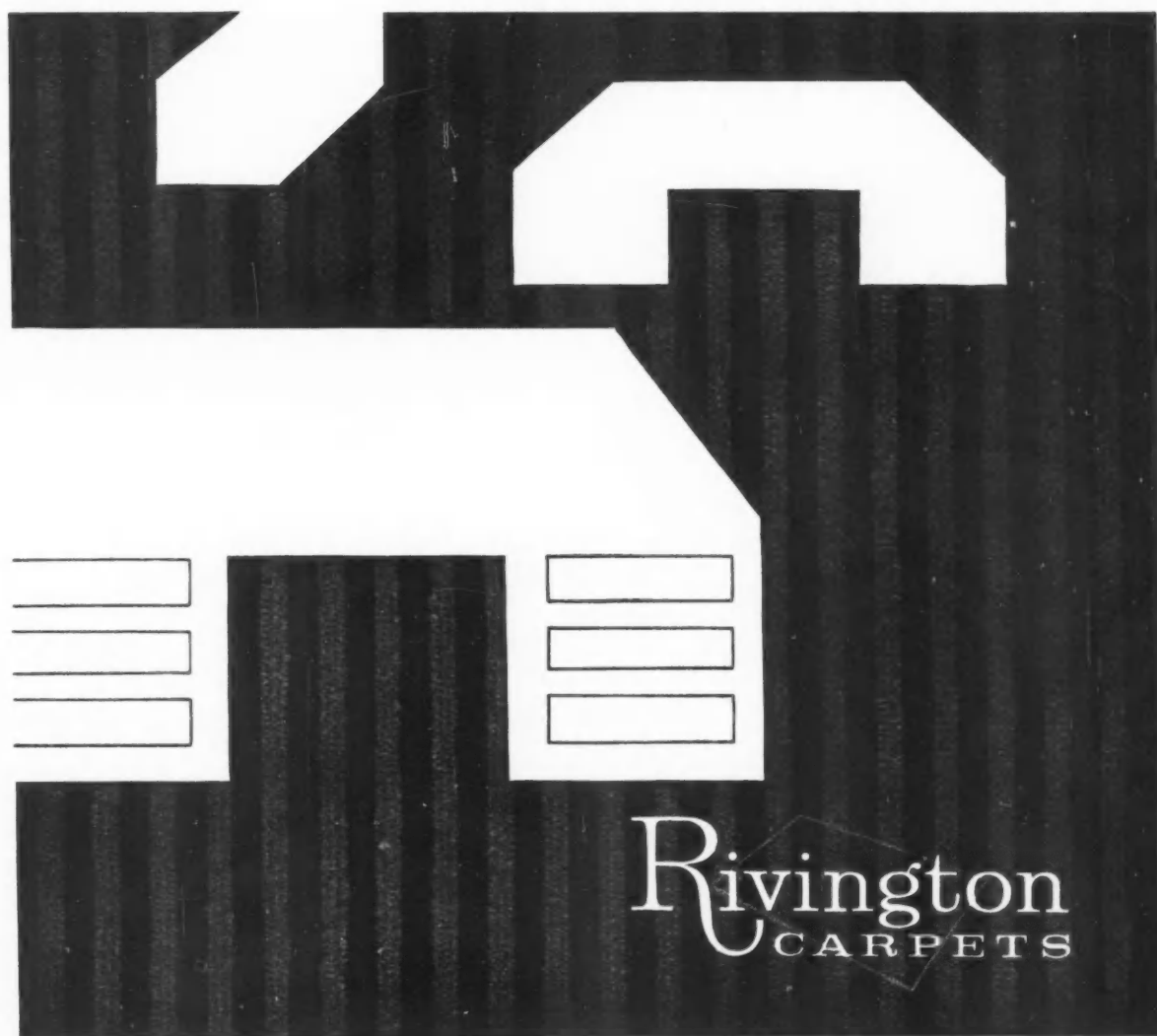
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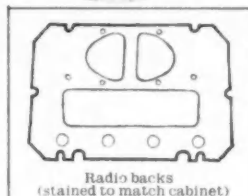
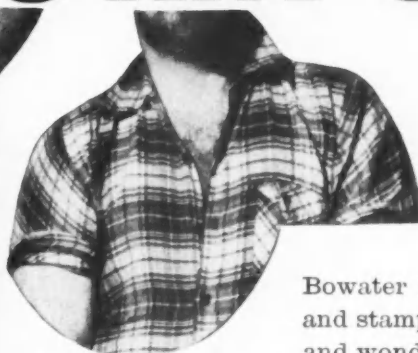
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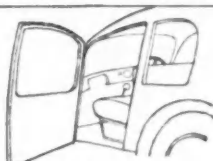
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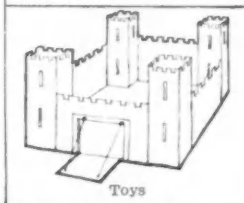
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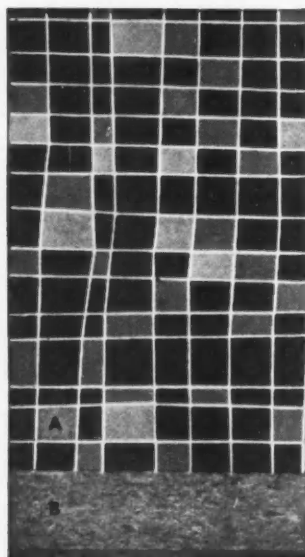


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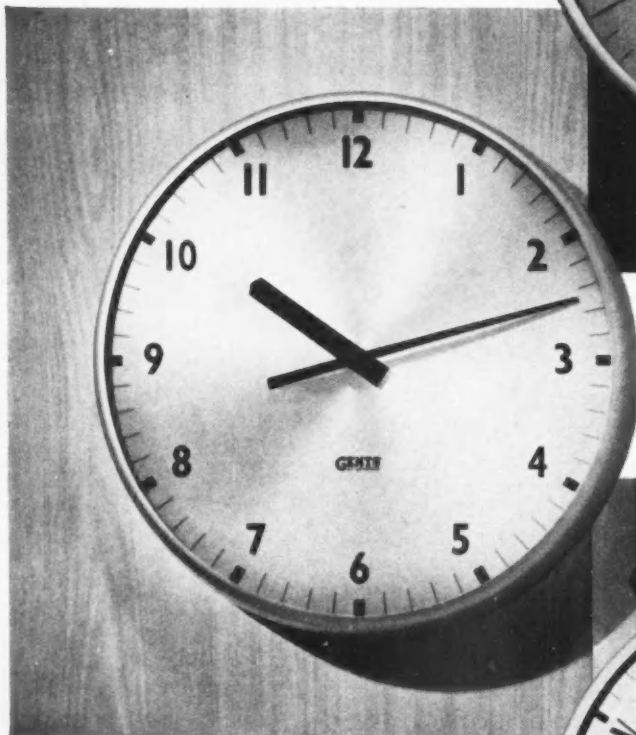
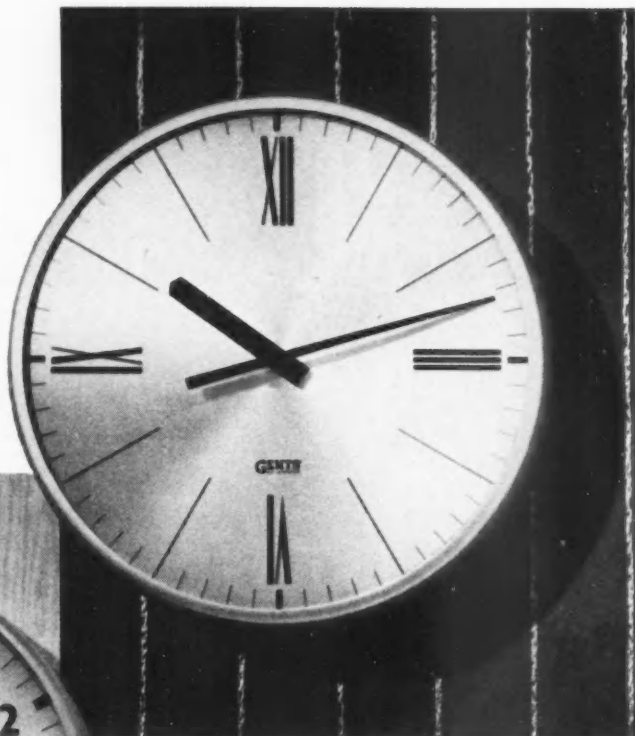


Maximum legibility and good taste are combined in the Gents wall clocks shown here.

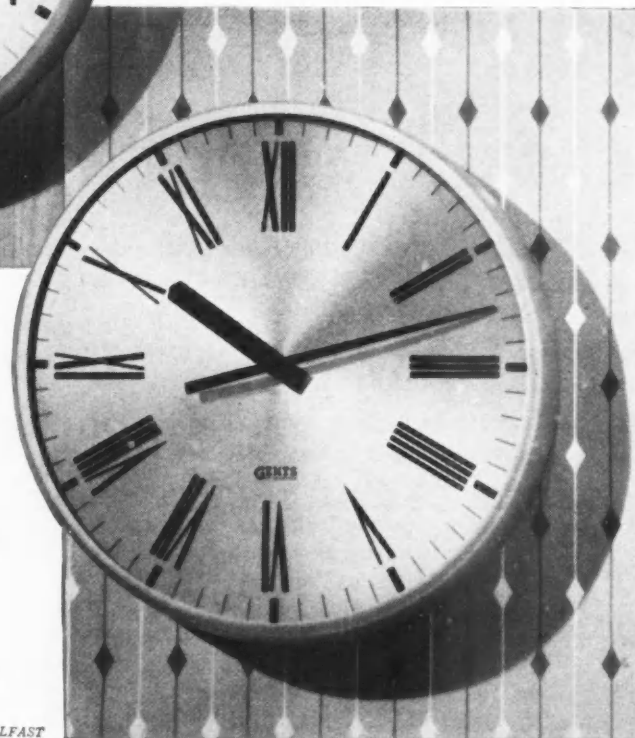
Styled by a leading industrial designer they provide a choice of standard models which fit happily into present-day surroundings and décor.

These and others in the extensive Gents range have been selected by the Council of Industrial Design for inclusion in Design Index.

All are available for operating either on A.C. Mains or as part of a Master Clock System.



In every way... Right!



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GENTS

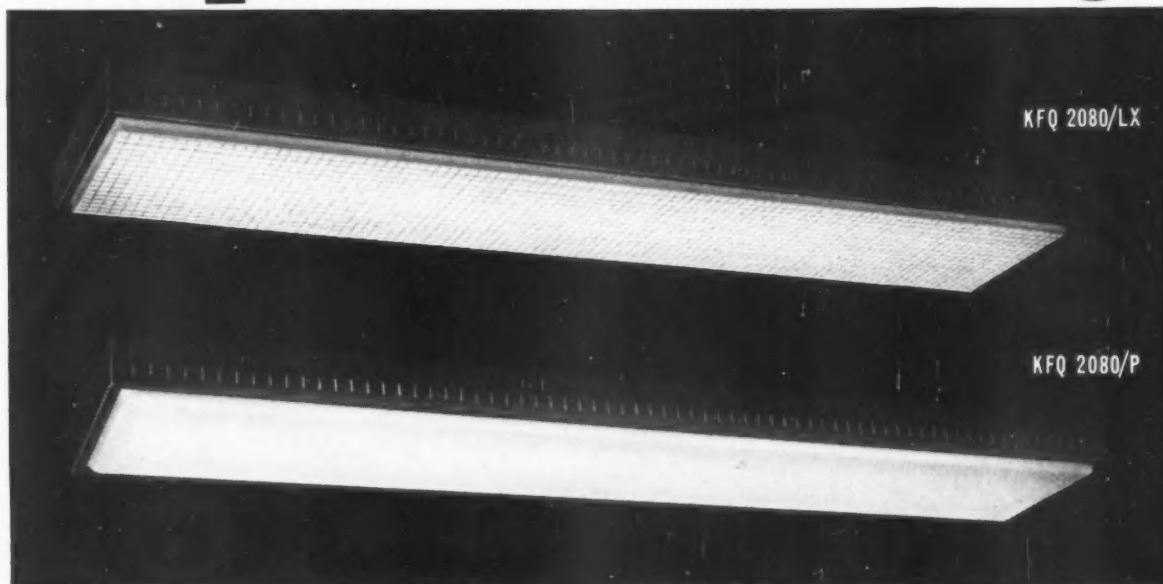
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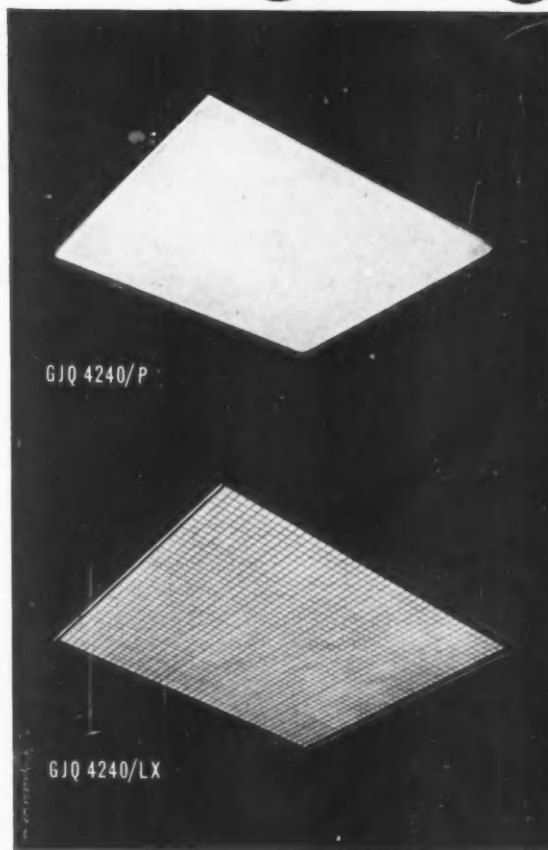
KFQ/2080/P and /LX are based on a simple batten fitting, with an extremely neat section, and house two 5ft. 80w. tubes with quick-start control gear. Spring-loaded lampholders facilitate fast re-lamping. The metal frame of both fittings is finished in mushroom grey, and slotted on all four sides. The type P incorporates an opal 'Perspex' dish, and the type LX has a Louverex diffuser.

GJQ/4240/P and /LX are slim 'wafer' fittings, square in shape (28" x 28"), for surface mounting. They incorporate four 2ft. 40w. tubes and quick-start control gear. The type P has an attractive single-piece 'Perspex' diffuser, fitting neatly into a mushroom grey metal frame, slotted to give an added degree of sparkle. The type LX also incorporates the slotted frame, with a 'Louverex' diffuser giving a greater concentration of downward light.

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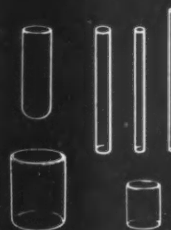


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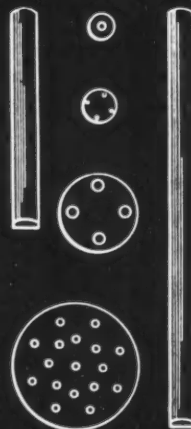
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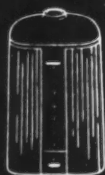
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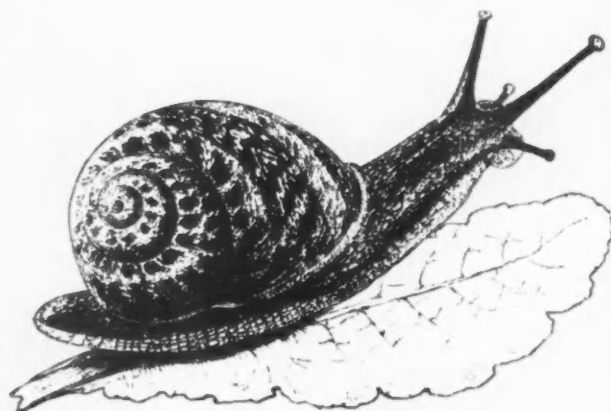


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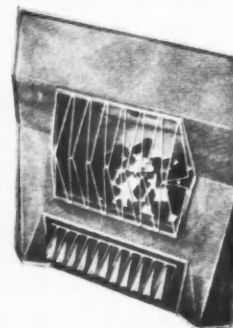
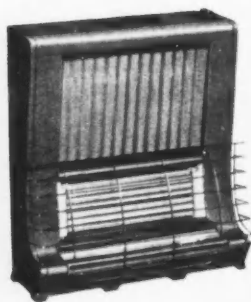
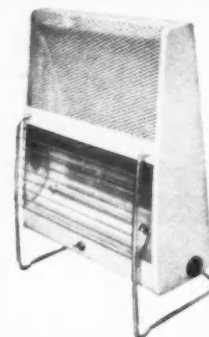
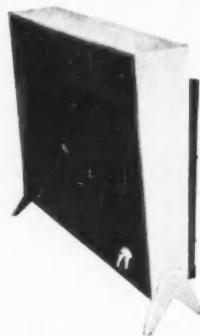
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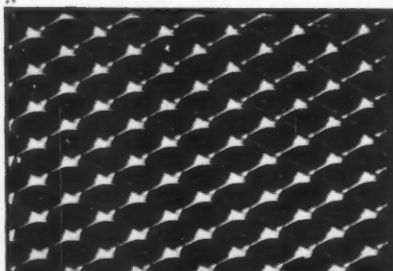


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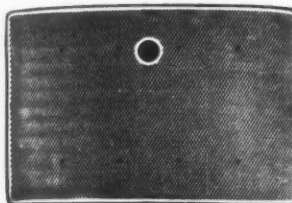


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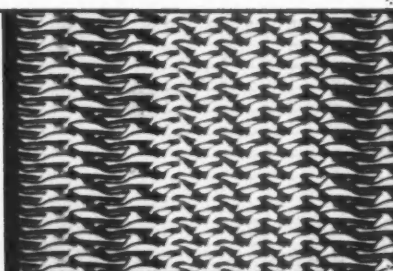
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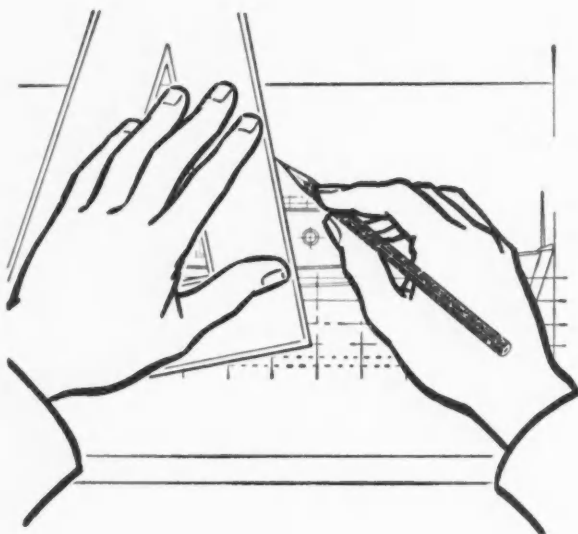
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"Cut out" designed by Terence Conran. M 1083 shown to scale.

A new collection of machine printed wallpapers has just been compiled by the London Office of The Wall Paper Manufacturers Limited 19/21 Mortimer Street, W.1. and is now available through wallpaper suppliers. Many prominent designers are associated with this collection among them Lucienne Day, Jacqueline Groag, Terence Conran, Joyce Storey and William Gear.

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39 **Rubbish**41 **Pointers**42 **Floor covering** *Dan Johnston*

This article is a practical guide to some of the different types of carpeting that are available on the British market. The illustrations show a selection of recent designs for the various materials and techniques discussed

58 **Design analysis 19: dishwasher** *L. Bruce Archer*

The dishwasher may well become one of the most popular of kitchen appliances, and the subject of this analysis is a free standing model which is unusual in conception. Its design was based on the results of a market research survey. The manufacturer's comment is on page 62

63 **Hotels: another look** *Gillian Naylor*

The next few years should see the completion of several new hotels in this country. Three that are already in operation, and that are to a certain extent special purpose hotels, are discussed in this feature

68 **Overseas review**

Italy: Triennale *Michael Farr*

In the first of two articles the author discusses how closely the *School and Home* theme of the twelfth Triennale was followed by the participating nations. New products from 12 countries show recent trends

Japan: Image of our century *Peter Smithson*

The author reports on the World Design Congress held recently in Tokyo

Germany: Showroom for furniture *Robert Spark*

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Addresses of British manufacturers in this issue are on page 93

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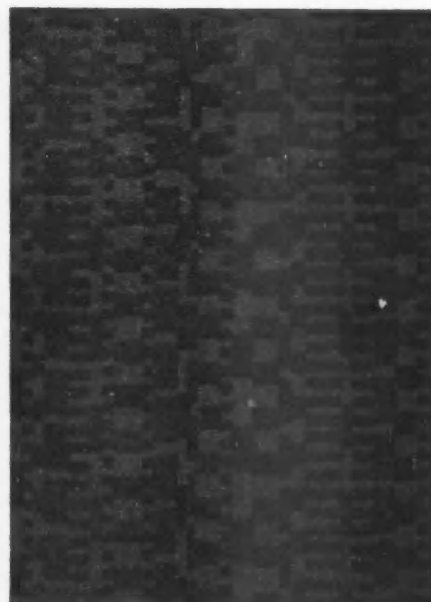
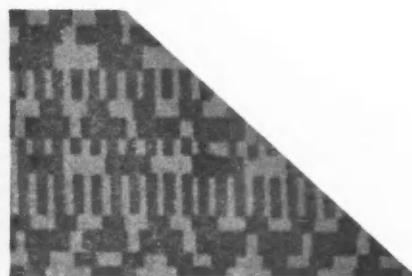
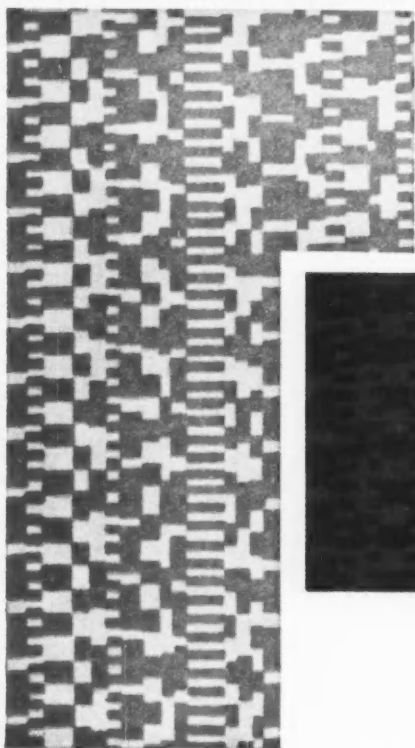
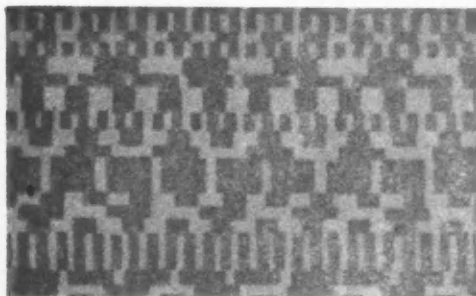
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COMMENT

Rubbish

Why should the streets of New York so often resemble a rubbish dump while Moscow is virtually clear of litter? Perhaps the answer lies in the former's affluent way of life, supported by a thriving packaging industry. "Keep Britain Tidy" we are told, but we do not often heed the veiled warning in these words. The slogan was started in 1954, but before that a campaign to stem the flow of litter was run by the Central Office of Information. The Litter Act of 1958 now provides the sanction; at the close of 1959 there had been no fewer than 2,632 convictions.

However, any walk in a public place will prove that there is still a lot of ground to be left uncovered. We have some sympathy with the 40 gardeners employed by the Borough of Scarborough, who spend between two and three hours each morning collecting litter. We are told that the collection of litter in London parks requires 20,000 man-hours every year; and that in 1957 a West Country holiday resort collected 43 tons of broken glass from the beach. Prevention might be better than a cure: more handy receptacles near potential scenes of crime would help. But more bins could mean more clutter and clutter, as all agitators for better looking streets well know, can often mean permanent, official litter.

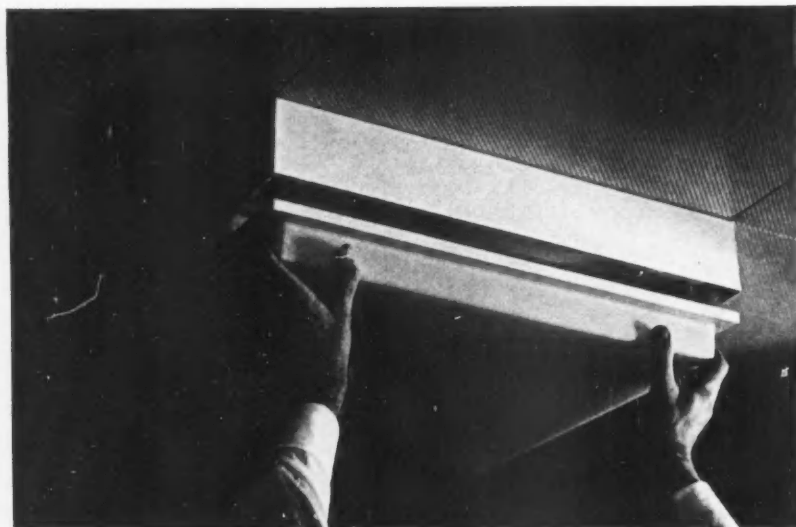
"It is important that litter bins, whose increase is vital to the success of the campaign, should not themselves offend the visual scene." The remark was made in the House of Commons in May by Sir Keith Joseph, Parliamentary Secretary to the Ministry of Housing & Local Government, which, with the Department of Health for Scotland has joined the CoID in organizing a competition for litter bins. The results were displayed in an outdoor exhibition in London last month; they will be featured in *DESIGN* for December. So far litter bin manufacture hardly ranks as an industry in its own right – let us hope it will never need to – but those who want to keep Britain tidy now have a wide range of bins in which to leave their litter. And when we have cleaned up the mess at home, who knows there might be a profitable export trade.

Those who missed the litter bin display will find photographs and details of them in 'Design Index', but a few examples are included in a new permanent exhibition of street furniture which opens on London's South Bank near County Hall on November 10. This display will provide for the first time a realistic outdoor setting for well designed lighting columns, shelters, seats and bins, chosen from 'Design Index' and is an extension of The Design Centre itself, where only small scale models of these items can be shown. It should be patronised by everyone with a pride in public places and particularly by the engineers of local authorities.

M.F.

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- Hinging on either side of the fitting when fully clear of the ceiling.
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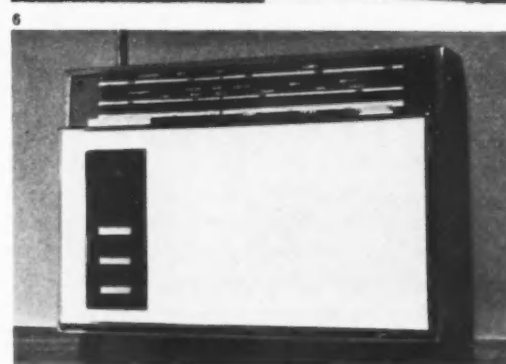
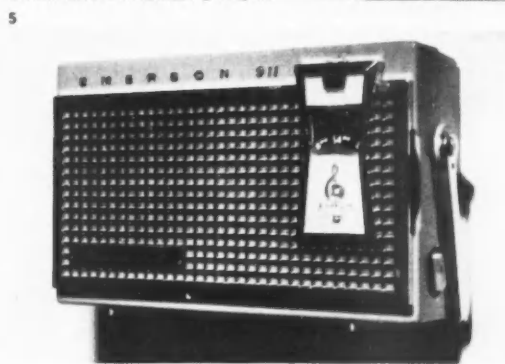
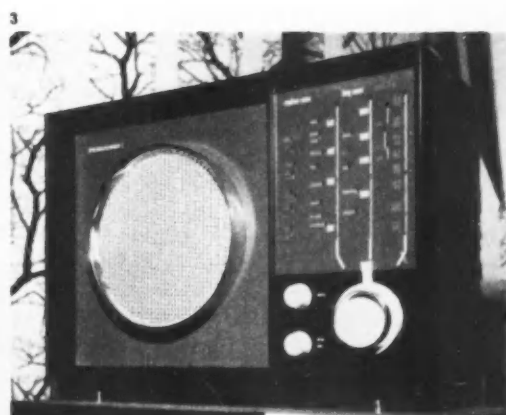
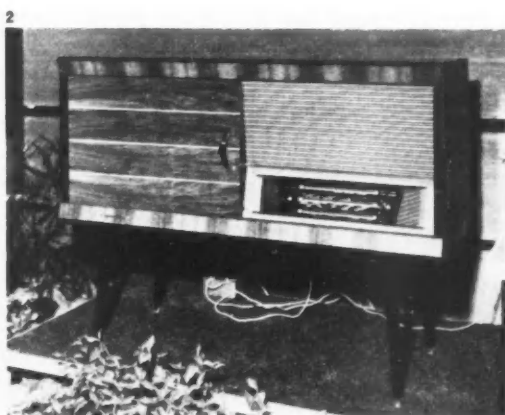
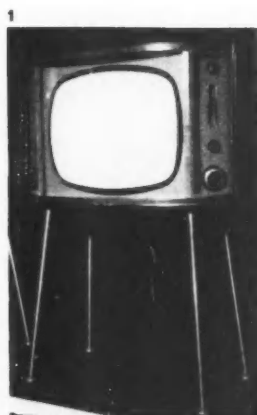
... but which way at this year's Radio Show?

Pointers is hardly an appropriate heading to apply to a review of this year's *Radio Show*. If there was one characteristic of the show it was that, with one exception, pointers in any direction, forwards, backwards or sideways, were noticeably lacking. From a design point of view the industry is standing still and shows little sign of budging.

The Germanic black and brass influence which crept over this country like an ugly rash two or three years ago has largely vanished. Nostalgic leaps into the past with Queen Anne TV's and Jacobean radiograms were almost entirely absent. So far so good. What has taken their place? Nothing, as far as we could see. The show was dominated by the dull, the nondescript and the pseudo-contemporary. Splayed legs were in abundance. Highly

polished veneers were as ubiquitous as ever. Pretentious detailing was particularly evident on radiograms. (Are people who buy radiograms really as lacking in taste as all that?) Plastics cabinets on radios and TV's were uninspiring, much the same as last year and the year before that. The substantial drop in recent sales of television sets may reflect a general dissatisfaction. Now is the time for some agonising reappraisals.

We mentioned an exception. Ultra has introduced a range of transistor radios which, like the firm's *Bermuda* TV receivers (DESIGN 142/57), sets the pace for the entire industry. These immaculate designs by the company's staff designer, Eric Marshall, are true pointers. They will be discussed in detail in a later article.



1 Sideways spread, an unhappy outcome of slimmer TV sets. Here it is crudely detailed. GEC 69 gns.

2 Cocktail cabinet approach in a radiogram. Regentone 49½ gns.

3 Bold and simple, if a little heavy in detailing. Ferguson 27 gns.

4 Sideways spread again – more surrounding frames to compensate for less depth. McMichael 85 gns.

5 All that glistens is not gold – transistor radio. Emerson 16 gns.

6 The instrument approach in a transistor radio – a pointer for the industry. Ultra 27 gns.

FLOOR COVERING

DAN JOHNSTON, *Industrial Officer, CoID*

DESIGN's first carpet survey, published in March 1956, outlined post-war developments within the industry at that time. This article is intended as a more practical guide to the cost, durability and design potential of the different types of carpeting and carpets produced in Britain (with one example from Eire). Rugs have not been included.

Purchasers frequently complain about the wearing properties of the carpets they have bought – their criticisms, however, may be unjustified because often the wrong type of carpet has been chosen for a particular purpose. A good carpet is, of necessity, expensive and there is an understandable tendency for many purchasers to seek low cost rather than quality. This survey may be useful in providing some basic facts for consideration when a carpet is chosen. Not all the types of floor covering discussed in the article are illustrated, but the basic weave effects are all shown in at least one material.

During the last decade Britain's carpet industry has had an ex-

panding home market. At all income levels it would seem that a more fully carpeted home has been one indication of a rising standard of living.

During this period of prosperity the carpet industry has given greatly increased opportunities to its designers, and modern design has made a very considerable dent in the massive output of Persian reproduction and traditional floral styles.

The total result in terms of *good* modern design in the shops must, however, be acknowledged as disappointing. (Some of the problems the industry is faced with were discussed at a conference organised recently by the CoID Scottish Committee, which is reported on page 79 of this issue.) The British carpet industry now offers a greater range of interesting modern designs than any other in the world, but the reaction against stodgy tradition in patterned carpets is such that many discriminating people will only buy plain carpet. The industry needs the support of the retailer and the customer to consolidate the design advances made in recent years.

MATTING

The character of matting depends almost entirely on the material from which it is manufactured.



Vertical section showing simple interlacing in a twill weave. Plain weave is also used.

Coconut*

Retail price approximately 15s per sq yd

This is the cheapest fibre for weaving into floor covering. It does not wear very well, and the fibre gradually disintegrates so that there is always a fine dust underneath the matting. The colours and designs are usually crude, and the great bulk of coconut matting used in Britain is imported from Far Eastern countries. Coconut matting is generally confined to use as a cheap covering for the kitchen floor.

Sisal

Retail price approximately 20s - 32s per sq yd

Sisal, although more expensive, is much harder wearing and cleaner in use than coconut matting. It can be dyed to cleaner and brighter colours, and it may be given a Latex backing. British production is still limited in design and colour to traditional 'kitchen styles'. Some interesting new ranges are, however, available on the British market from Continental producers and from Eire. These new designs have made sisal matting a cheap and practical floor covering that can be used in other rooms in the house, as well as in the kitchen.

Wood fibre

Retail price approximately 19s - 26s per sq yd

Wood fibre, after being processed into a sheet of tough Kraft paper, is impregnated and twisted and makes a hard wearing yarn very suitable for use in floor covering. It may be dyed to a good range of colours and, being finer than jute or sisal, produces a smoother woven surface which may be Latex backed. The design potential of such material has not yet been fully exploited.

Jute

Retail price approximately 9s - 25s per sq yd

Jute is one of the cheapest fibres available for use in floor coverings. The sale of jute carpeting is based on cheapness, and its wearing qualities vary very much according to the price paid. Jute is softer to the tread than sisal or coconut. There are extremely interesting ranges available from British firms, with neat patterns in good colours (but colours on jute are liable to fade if exposed to bright sunlight). The styles include weaves comparable to other mattings, also cord carpeting and effects in cut pile.

Although the cheaper jute matting and carpets are not hard wearing, there are rooms in many houses, such as spare bedrooms, where the floor covering gets little actual wear. Such rooms often look much better and are more easily cleaned if inexpensively carpeted.

Rush

Retail price approximately 18s - 42s per sq yd

Natural rush plaited into a thick floor covering is surprisingly hard wearing if used appropriately and properly maintained. The coarse texture can be worked up into interesting design effects and the natural colour is pleasant. Supplies are imported mainly from China and Holland, but there is some British production.

FELT

Needleloom felt*

Retail price 20s per sq yd

Needleloom felt, made from 'shoddy' and mixed fibre, was sold in great quantities in the years after the war as a cheap floor covering. Its wearing qualities were poor. As the choice of carpeting has increased, needleloom felts for this purpose have been virtually withdrawn, but appropriate material is, of course, widely used as underfelt.

Art felt*

Retail price approximately 27s - 50s per sq yd

Art felts are made from higher grade raw material than needleloom and are much more firmly felted. The colour ranges are excellent, and the material is useful for exhibition work and as shop display material.

CORD CARPET

Made in hair, wool, cotton, rayon, jute, sisal, and mixtures.

Retail price approximately 25s - 50s per sq yd

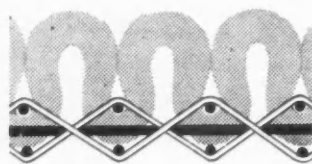
Cord carpets have become established as an inexpensive version of the Brussels weave (ie Wilton, with the pile loops uncut).

Haircord has a special reputation as a closely woven and hard wearing floor covering. The animal fibre used is scarce nowadays and relatively expensive; when used at all, it is generally in blends with wool.

Cords made from wool and other fibres may also be hard wearing, but often they are intended as cheap carpets. As such, they are thin and of

*Not illustrated

Cord carpet *continued*



A simple pile weave with the loops uncut as in Brussels carpet.

open weave, giving little resistance to really hard wear.

Cord carpets are not luxurious in appearance. The traditional haircord carpet was plain, and had the natural dark grey-brown colour of the raw material. British manufacturers are producing good ranges of cords in plain colours and neat patterns from wool and other fibres.

Cord carpets, generally with much larger scale patterns, are popular in Continental countries where they are usually called Bouclé carpets.

Cord carpets can be used satisfactorily in the home if quality, price and the wearing properties required are carefully considered. It would be wrong to expect hard wear on stairs, hall or living room from cheap wool, rayon or jute cords.

TUFTED CARPET

Made with pile of rayon, wool or acrylic fibre or mixtures. A percentage of nylon is sometimes used.

Retail price approximately 30s – 95s per sq yd



The tufted carpet differs from the conventional Wilton or Axminster in that the pile is stitched into an already woven hessian backing. The pile must subsequently be anchored by coating the back with rubber or plastics. In Wilton or Axminster, the back is woven simultaneously with the insertion of pile for the face of the carpet. The pile needs no subsequent fixing.

Most tufted carpets have a viscose rayon pile. This is because viscose rayon gives a serviceable carpet at an inexpensive price, but it is also due to the suitability of rayon for the technical process.

Most tufted carpets from viscose rayon wear satisfactorily. Weight for weight, rayon carpets do not wear as well as wool, but as rayon is much cheaper, a greater density of pile is economically possible.

Rayon is not nearly so resilient as wool, and rayon tufted carpets flatten more easily. Rayon does not have the 'wear clean' properties of wool, and when new and in light or bright colours, rayon tufted carpets soil more quickly. Due to the Latex backing, tufted carpets may not be cleaned by use of dry cleaning solvents.

The range of colours is as wide as on wool, and some colours on rayon can be brighter. Tufted carpets may have cut or uncut pile. The cheaper styles are usually looped and are comparable in appearance with the less expensive plain cord carpets.

Pattern possibilities at present are limited. As an alternative to plain colours, there are mottles in two or more colours, some stripe effects, and textures derived from looped pile of varied heights, perhaps with mottle and plain yarns in the same carpet. Printing is beginning to be used.

Because of their coated backing, all tufted carpets can be cut in any direction for close fitting without binding. A great deal of the output of tufted carpet is in widths of up to 15 ft. Seaming is therefore often unnecessary.

The production of tufted carpet is growing rapidly and the technique is the subject of intensive and continuous experiment. There is also the possibility that the less desirable properties of viscose as a carpet fibre will be gradually reduced. Similarly, the range of design possibilities in tufted carpets is likely to increase.

Taking tufted carpet production at its present stage of development, the cheaper qualities, especially plains in light colours, are most satisfactorily used in bedrooms and other light traffic areas. Some of the more expensive qualities containing wool, acrylic fibre or nylon will give satisfaction in areas of very much harder usage.

AXMINSTER

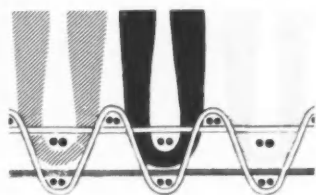
Made with pile of wool, but in recent years blends of wool and rayon have also been produced.

Retail price approximately 45s – 140s per sq yd, but a normal quality for domestic use costs about 60s per sq yd

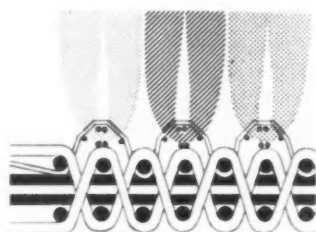
The principal properties of Axminster carpet derive from the predominant use of wool as the pile material. Wool is resilient, it wears well, it is warm, it can be dyed to good colours, and it tends to 'wear clean'.

Moth-proofing of wool carpets is now almost universal. Wool is thus certainly the best all-round carpet fibre, but it is relatively expensive and must be used in sufficient weight if a hard wearing carpet is to be produced. Economy in price is therefore unjustified if an extremely hard wearing carpet is required.

The Axminster processes give the designer plenty of scope. In the case of



Spool Axminster
(In Gripper Axminster the ribs on the back are more prominent.)

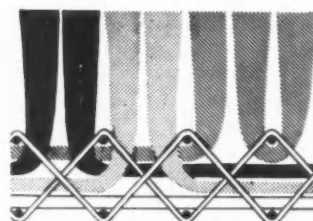


Chenille Axminster
Whichever technique is employed (Gripper, Spool or Chenille), all the pile yarn appears on the carpet surface, irrespective of the demands of the pattern.

WILTON

Made principally with wool pile, but experimental quantities are being made using a proportion of nylon or acrylic fibre.

Retail price approximately 55s - 200s per sq yd, but a normal quality for domestic use costs about 70s per sq yd

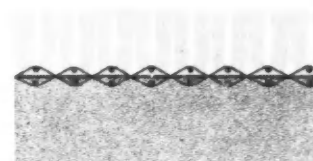


The Wilton process permits the production of cut, or looped pile (Brussels). In patterned Wilton, a yarn in a colour not required on the surface must lie at the base of the pile where it gives added resilience.

SHORT PILE VELVET

Chief production is in nylon pile, but a wool pile material is also available.

Retail price approximately 53s - 90s per sq yd



Fine short tufts of nylon or wool with a foam rubber backing.

Chenille and Spool Axminster, the number of colours which can be used is virtually unlimited.

The greater part of British carpets are produced by the Spool or Gripper Axminster processes. The production devoted to the Chenille process is growing steadily smaller each year.

An important development in recent years is the increased production of broadloom Axminster carpets. The availability of carpet in widths up to 15 ft avoids the seaming necessary with 27-inch body carpet.

Axminster carpets are manufactured in grades suited to all purposes. A principal problem for the purchaser is to relate the necessary quality to the wear required.

As with Axminster, many of the principal properties of Wilton carpet in use derive from its wool pile. The range of qualities tends however to be much greater, not only in weight of carpet, but in fineness of pile surface. In addition to Wilton carpets with woollen pile some firms also manufacture carpet with the finer worsted pile.

Wilton carpet has a stronger back than Axminster. There is some evidence, in other than low grade Wiltons, that this stronger back and the superior anchoring of the tufts, give better wearing qualities (eg on stairs) than can be expected from Axminster at a comparable price.

The design potential of the Wilton loom is not so great as the Axminster, but it is not uncommon to employ four or five colours, and there is the additional opportunity to use both cut and uncut pile to produce different effects. The great advantage of the Wilton process to the designer is the versatility of the 27-inch wide loom. This adaptability is valuable for all types of contract work where individual schemes are required. Several manufacturers offer the service of special colourings for yardages as short as 30 yd of 27-inch wide material.

The total production of Wilton carpet is much smaller than that of Axminster. A considerable proportion is devoted to plain carpeting which is available in broadloom widths of up to 15 ft. A tendency in recent years has been to offer plain carpets in hard, curled pile as an alternative to smooth Wilton. These curled pile qualities disguise footmarks and pile pressure markings.

Nylon is an expensive and extremely hard wearing fibre, and the difficulty of using it in the manufacture of carpets lay in reducing the weight of nylon while retaining the cushioning effect expected from carpet. The cushioning effect is thus supplied by a foam rubber backing to a nylon velvet, which is light in weight, but giving a dense surface.

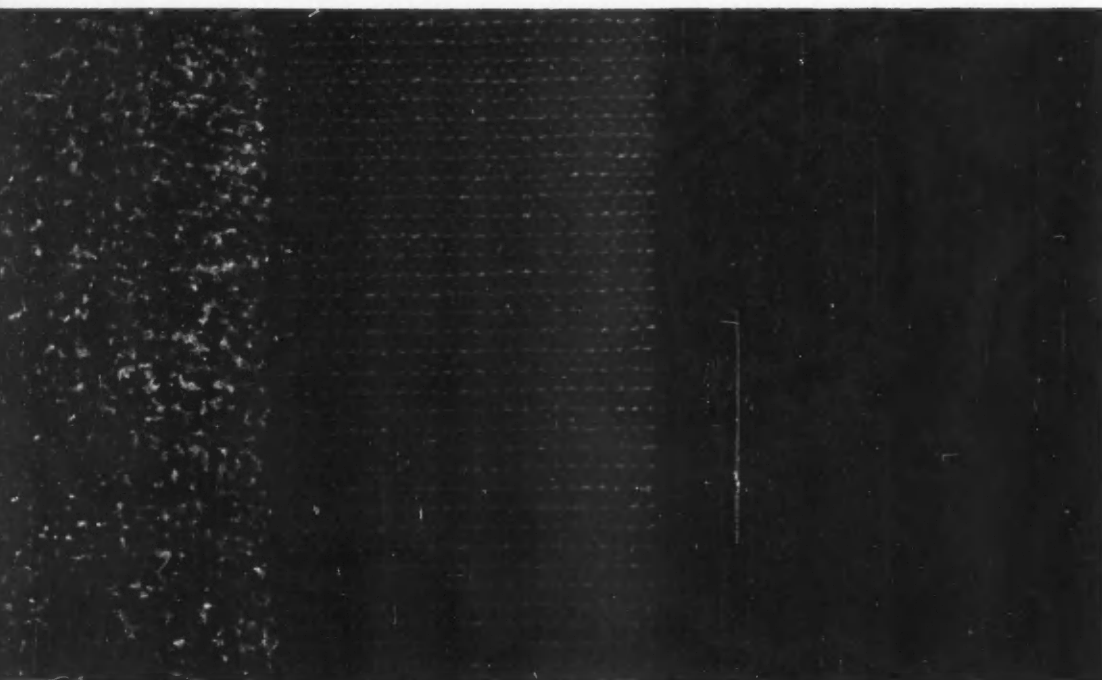
The result is a hard wearing carpet of silk-like appearance. The nylon surface is easily cleaned by washing, since it will not absorb water. As the pile is so short, the dust from foot-marks shows clearly on certain colours (but so do footmarks on a smooth plain Wilton, if for slightly different reasons).

Designs may be woven or printed. The number of colours is limited to two or three. Since the carpet is bonded to its foam rubber back, it may be cut in any direction for close fitting. In assessing cost, no additional underlay is necessary.

Jute carpeting

Three inexpensive carpetings in 100 per cent jute. Two, *left* and *right*, are in cut pile, woven on Wilton looms, and the third, *centre*, is a light cord. This firm's ranges are notable for their good colours and neat patterns. *Katan Marl 3*, *left*, available in 27- and 36-inch widths and three other colours.

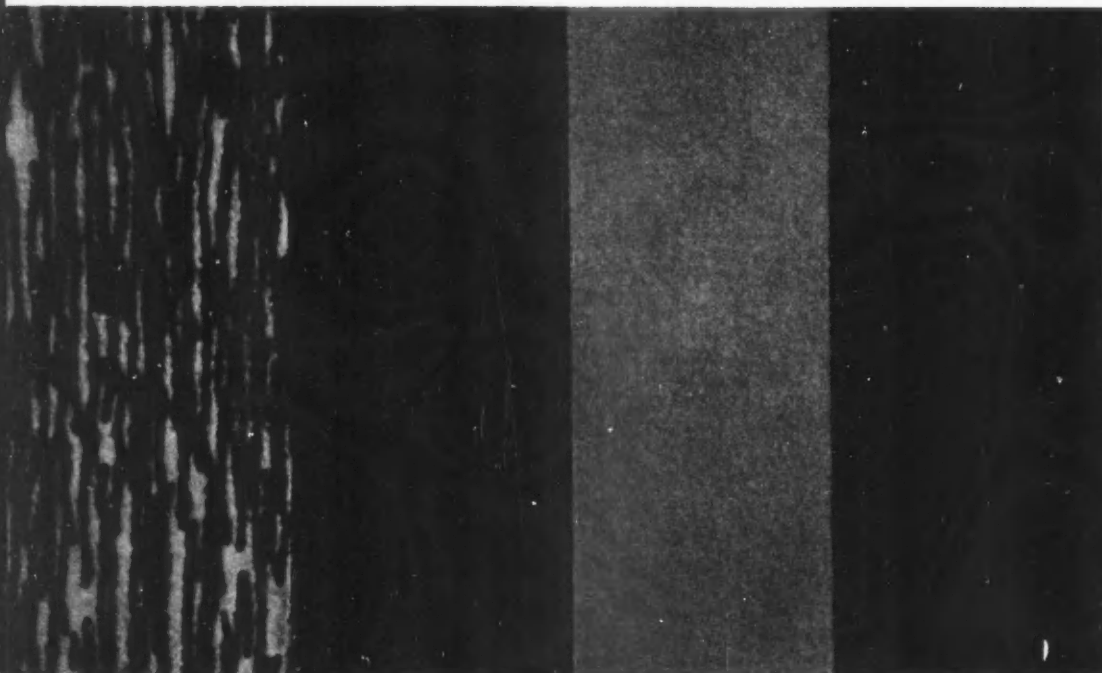
17s 6d per sq yd. Brussette GRSR 5, *centre*, Latex backed; available in 12 colours and various widths of up to nine ft. *16s per sq yd. Caliph 5*, *right*, available in five colourways and widths of up to 27 inches. *15s per linear yd (27 inches wide)*. MAKER *Jute Industries Ltd.*



Short pile velvet

This firm's range of nylon pile carpets has a short dense pile backed with foam rubber which gives a cushioning effect. Printed and woven designs are available. The carpets are in excellent colours and have a fine silk-like appearance and a smooth texture. *Shildon Broken Stripe*, *left*, a printed design available in one other colourway. *£3 2s 6d per linear yd (27*

inches wide). *Shildon Fishnet*, *left centre*, a woven design available in four colourways. *67s 6d per linear yd (27 inches wide)*. *Shildon, Pink Beige* and *Rifle Green*, *right*, plain carpets, available in 20 colourways. *£2 17s 6d per linear yd (27 inches wide)*. A 54-inch width is also available. DESIGNER (*patterns*) *Ronald Grierson*. MAKER *Alfred Morris Furnishings Ltd.*



Approximate retail prices are quoted, including purchase tax. For orders below a minimum quantity there may be an additional cutting charge.



Axminster

Creating some form of textural interest has been a constant aim for designers of modern carpets; the texture may be in the surface structure of the carpet, or it may be simulated by a subtle use of pattern and colour.

This ambitious design seems to reach the ultimate in striving for textural effect through pattern and colour, and the firm has shown considerable ingenuity in interpreting the

designer's original idea. The carpet is of course not an easy one to use, but it could be most effective if used intelligently in certain types of modern interior. *Rossendale, Beverly Hills 55/8032*, an Axminster carpet in all wool pile, available in broadloom widths up to 12 ft and in 27-inch body carpet; two other colourways. £4 per sq yd. DESIGNER *Audrey Levy*. MAKER *Broadloom Carpets Ltd.*

Wilton

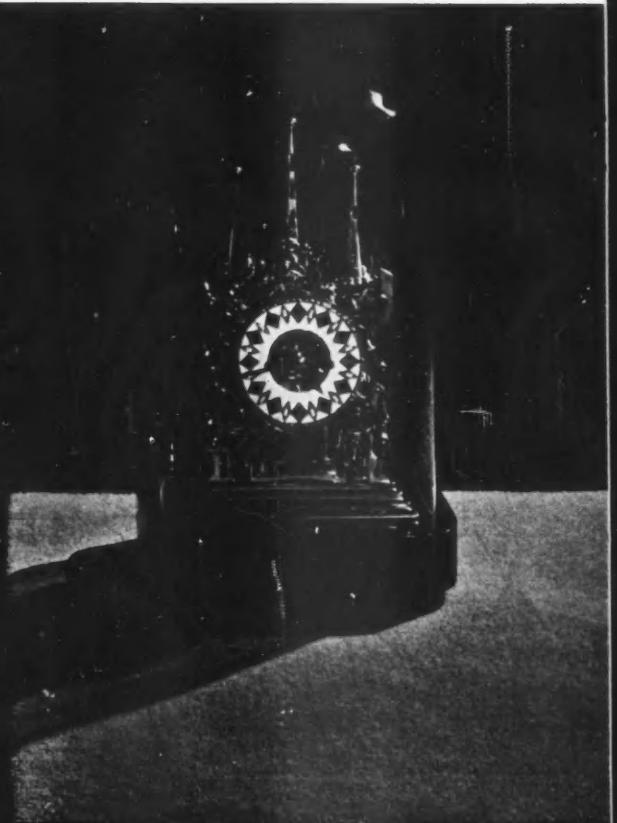
A design which successfully fulfils the standard requirements for a contract carpet. The pattern is interesting without being too dominant, and will help to disguise footmarks, spotting and wear. The colours are muted, but the tones are not so close that they will lose value when the carpet is soiled. The

scale of the pattern is appropriate for use in a large area, and the design has been carefully considered to avoid 'direction lines'. *Cambridge Wilton 30/2053*, a high quality all-wool pile carpet available in four colourways; width 27 inches. MAKER *T. F. Firth & Sons Ltd. Price from maker.*

Wilton

The extension and improvement of the plain colour ranges now available from British carpet manufacturers is one indication of the importance of colour values in today's interiors. For similar reasons, many successful carpet designs are in neat two-colour 'background' patterns, which allow the designer to offer a wide range of well defined colourways. *Lamina 9118, colour 53, patterned carpet*, one of five designs in Wilton Royal's *Architects' Collection*, available in four wool

pile qualities; special colours can be ordered. *From £2 11s per linear yd (27 inches wide)*. *Braemore, Chartreuse 3189, plain carpet*, in three wool pile qualities. The firm offers a sample box 72 colours, but special colours can be dyed at no extra cost. *From £2 4s 3d per linear yd (27 inches wide)*. A 36-inch width is also available. DESIGNERS (*patterned carpet*) *Wilton Royal Studio, colouring by Lucienne Day*. MAKER *Wilton Royal Carpet Factory Ltd.*

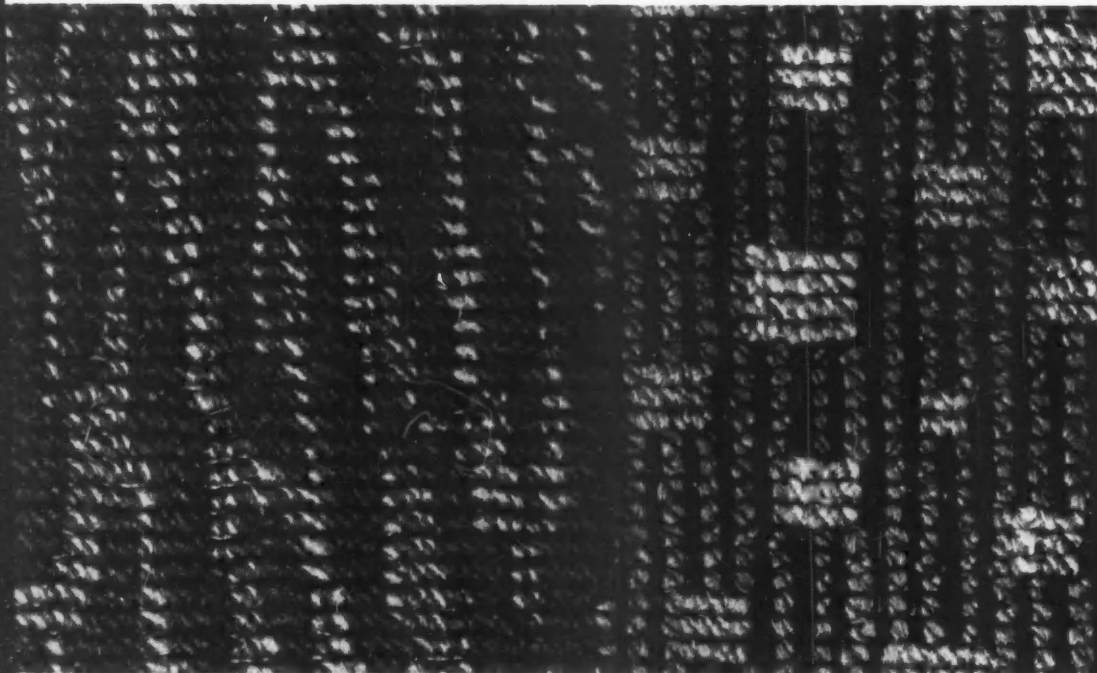




Cord carpet (sisal)

These patterns by an Irish firm show how a progressive approach to design and colour can influence the potential use of a floor covering material. By advancing from hard crude colours and simple stripes to softer shades and more sophisticated patterns, Tintawn Ltd has transformed what has been thought to be a cheap kitchen floorcovering into

something suitable for many other uses. These two designs are in Tintawn Bouclé (sisal yarn, with a looped pile and plastics backing). *Grass*, left, is in five colourways and *Square*, right, in three; widths 27 and 72 inches (a 12-ft width will shortly be available). £1 11s 6d per sq yd. DESIGNER Margaret Leischner. MAKER Tintawn Ltd.

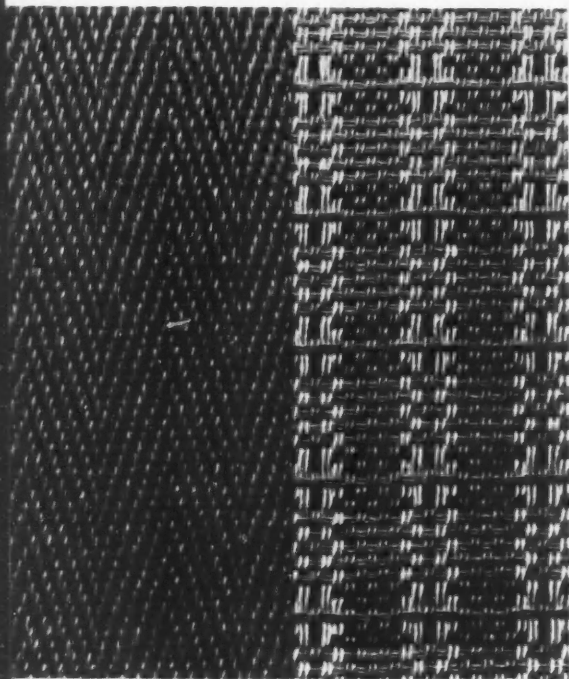


Matting (wood fibre)

This material is woven from wood fibre processed into strong Kraft paper and then impregnated and dyed. *Somic Woodweave* (left K62, right K25), available in various widths up to 54 inches. £1 6s per sq yd (with Latex backing); 19s per sq yd (without backing). MAKER Somic Ltd.

Matting (rush)

The matting is plaited by hand and is about half an inch thick. Available in the natural rush colour only, it has a pleasant texture, and is produced in a variety of simple patterns. £2 5s per sq yd (36 inches wide). MAKER Waveney Apple Growers Ltd.





Axminster

The triangular motif, which is capable of many ingenious variations, has been in recent years a constantly recurring theme in patterned furnishing materials from printed textiles and wallpapers to woven carpets and inlaid linoleums. This design was first introduced to meet Continental demand. Its glowing colours and well organised pattern make it a good domestic carpet.

Ramsey 3/6202, an Axminster all-wool pile carpet; available in five colourways, and broadloom widths up to 9 ft and in 27-inch body carpet. £3 3s per sq yd. MAKER *Quayle & Tranter Ltd.*

Axminster

The polka dot theme was the starting point for modern design in carpets, and is associated with designs produced at the time of the *Festival of Britain*.

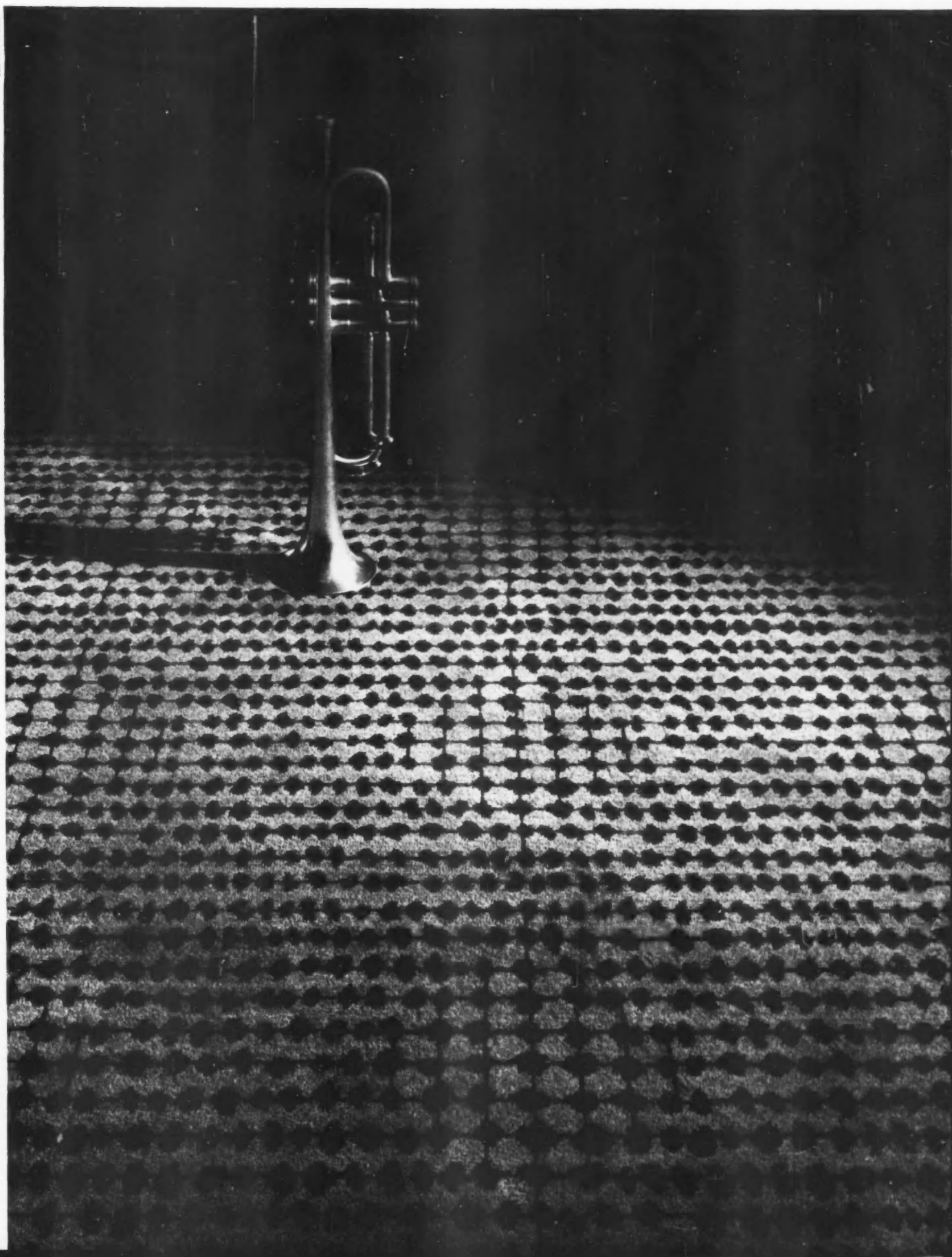
This development while basically simple, is interesting because of the way in which the lines linking the dots change direction. The carpet is an extremely practical one for use in the large areas for which it is intended. *Evalok, Belmore 3412*,

a speciality high grade carpet in all-wool pile, traditionally woven, but firmly bonded to a foam rubber backing. (*Evalok* carpets are primarily intended for contract work in restaurants, hotels and showrooms, etc. They are available in a range of patterns and plain colours. Special designs and colours can be made to order.) Width 36 inches. **MAKER** *A. F. Stoddard & Co Ltd*. Price from maker.

Wilton

The fine woollen and worsted Wiltons produced by this firm give an opportunity for well organised and simple patterns. Certainly the pattern with solid squares on a contrasting ground would be much less successful if its precise regularity were lost in a coarser weave. There is a comprehensive range of designs in these qualities, and both special colours and special designs to the requirements of architects are available. *Wessex, Ambassador Blue 3022*, broadloom plain carpet; an all-wool pile Wilton carpet in 20 colours, available in 10

widths up to 15 ft. *£3 12s 9d per sq yd*. (In addition to *Wessex* there is a *Wessex Junior* quality, suitable for use in bedrooms; this is available in the same colour range, and in widths up to 12 ft. *£2 15s 9d per sq yd*.) *Deva 1/51045*, left, a fine woollen Wilton in all-wool pile. *£3 per linear yd (27 inches wide)*. *Karasta 5/52082*, right, all-wool pile. *£3 12s per linear yd (27 inches wide)*. *Deva* and *Karasta* are available in a 36-inch width. **DESIGNERS** *C. G. Farmer (Deva)*; *J. H. Mellor (Karasta)*. **MAKER** *Carpet Trades Ltd*.



Axminster

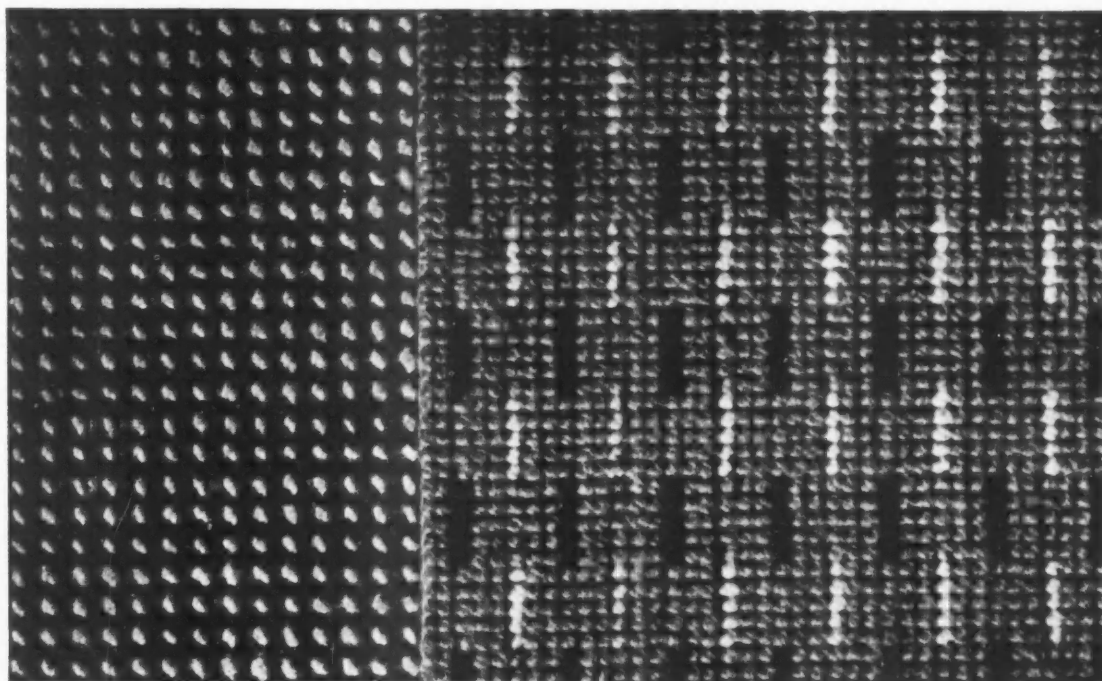
One limitation the carpet designer has to face is the fact that his original line drawing will be distorted when it is transferred to squared paper. To counterbalance this, however, the great advantage of the spool Axminster process is that an almost unlimited number of colours can be used. In the traditional floral pattern, therefore, realism is derived not from line drawing, but from detailed colour shading.

Although they have tended to become stereotyped, floral patterns are still in great demand in both home and export markets. Recently, however, a few designers have been

attempting to achieve new effects, while still exploiting the full potential of the Axminster loom.

This design uses 14 colours (compared with the 40 or more that are quite often used in spool Axminster florals); it has a painterly quality, and its impressionistic approach and soft contours make an unusual and interesting contribution to carpet design. *Sicilian Axminster, Skin Dive 4669/3*, an all-wool pile carpet designed for spool Axminster looms. £2 2s 6d per linear yd (27 inches wide). DESIGNER Peter McGowan. MAKER John Crossley & Sons Ltd.

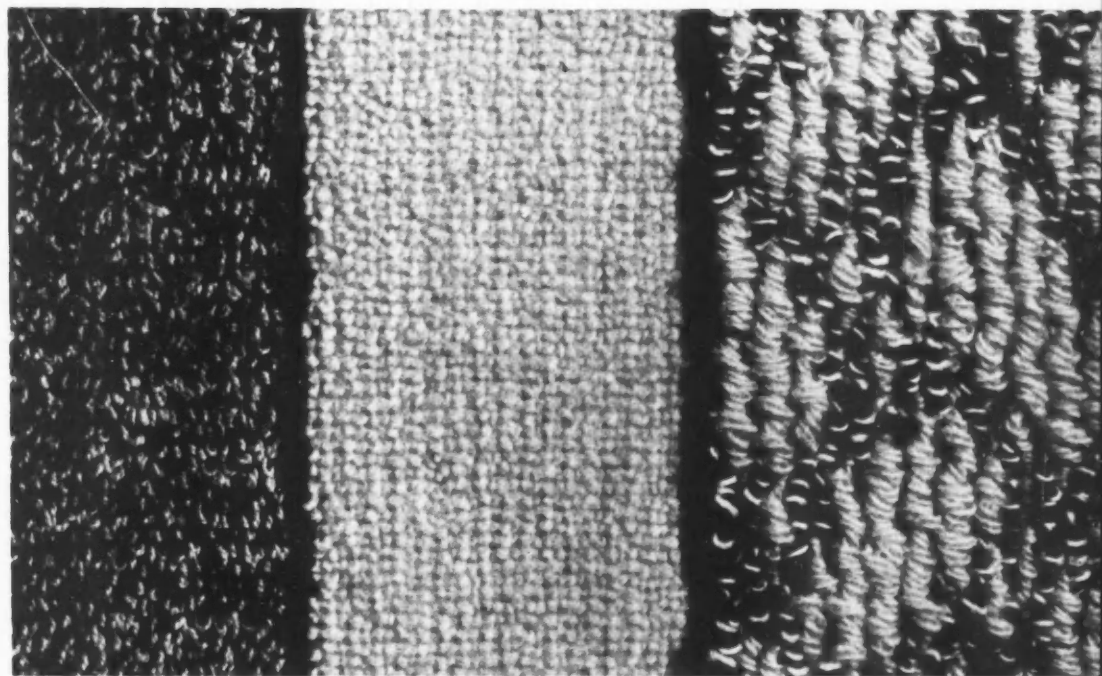




Cord (wool/rayon mixture)

The short knobby loop of this inexpensive cord carpet produces a pleasant texture which is emphasised by the simple patterns in good colours. *Purbeck 237/007B*, right, the pile is a wool/rayon mixture; available in 16 colourways in

widths of up to 36 inches. £1 8s 6d per linear yd (27 inches wide). *Franton 245/000*, left, a wool/rayon mixture in 10 colourways. £1 9s per linear yd (27 inches wide). A 36-inch width is also available. **MAKER** Frank Stone (Kidderminster) Ltd.



Tufted carpet

Three examples of the range of patterns and textures now available in tufted carpets. *Kosset Green Label*, left, a high quality tufted carpet in 100 per cent rayon pile; a high twist rayon is used in loops, giving considerable resistance to crushing. Available in a range of plain colours, and seven two-colour versions, in widths of up to 15 ft. £2 7s 3d per sq yd. *Kosset Yellow Label*, centre, a tufted carpet in all-wool

cut pile, in 12 plain colours, and widths of up to 15 ft. £3 2s 6d per sq yd. *Parma, Kosset Contour Series*, right, a wool/rayon construction; the pattern is developed by the use of high and low loops in contrasting colours. Wool, the more resilient fibre, is brought to the surface of the carpet in the higher loops. In four colourways in widths of up to 15 ft. £2 14s per sq yd. **MAKER** Kosset Carpets Ltd.



Wilton

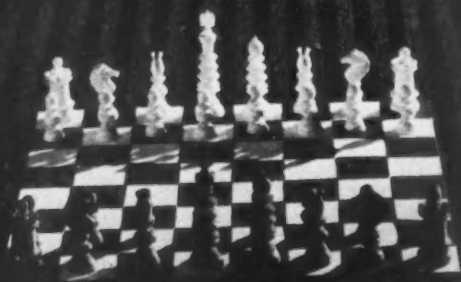
◀ This design is available in any colour combinations and several qualities, according to customers' requirements. This kind of service is a good demonstration of the versatility of the narrow width Wilton loom. The design itself combines a hint of textural effect with a well worked out linear pattern. The carpet is suitable for the home or for contract work, and the quality can be chosen according to the purpose for which the carpet is required.

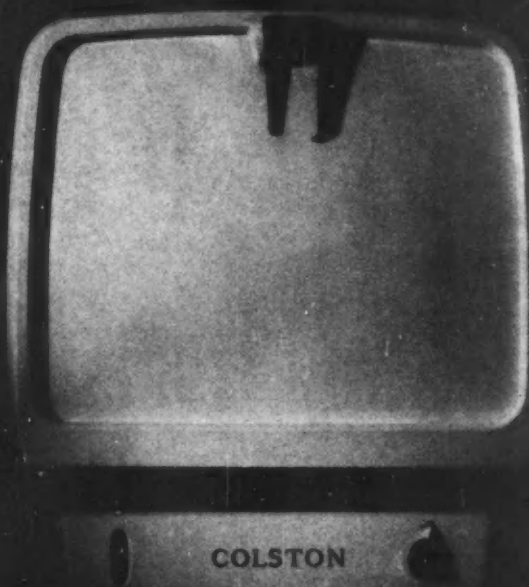
Ticker Tape 6530, colourway 4305; all-wool pile, available in any two-colour combination and a variety of Wilton qualities. From £2 18s 6d per linear yd (27 inches wide). DESIGNER Robert McLean. MAKER Hugh Mackay & Co Ltd.

Tufted carpet

As far as pattern is concerned, the potential of tufted carpets is at present very limited. In all trades, whenever technical limitations press hard, designer and manufacturer must fully exploit the possibilities that are available to them. Stripe effects may not be new to carpets, but the carpet trade has tended to be suspicious of any form of directional design in

its approach to pattern. With this range, therefore, the firm has filled a definite need. *The New Line*; the pile is 85 per cent rayon and 15 per cent nylon and the carpet has a 'scrimmed backing' for extra strength and dimensional stability. Available in widths of up to 15 ft, and in six colourways. £2 19s 6d per sq yd. MAKER Rivington Carpets Ltd.





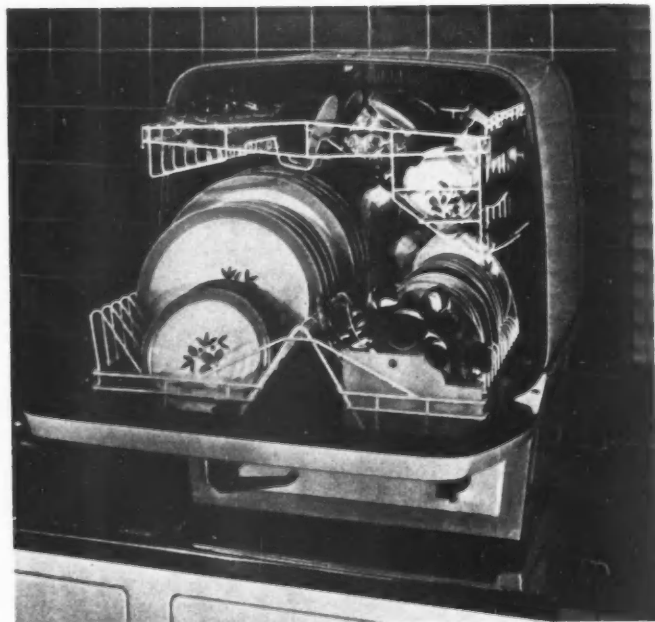
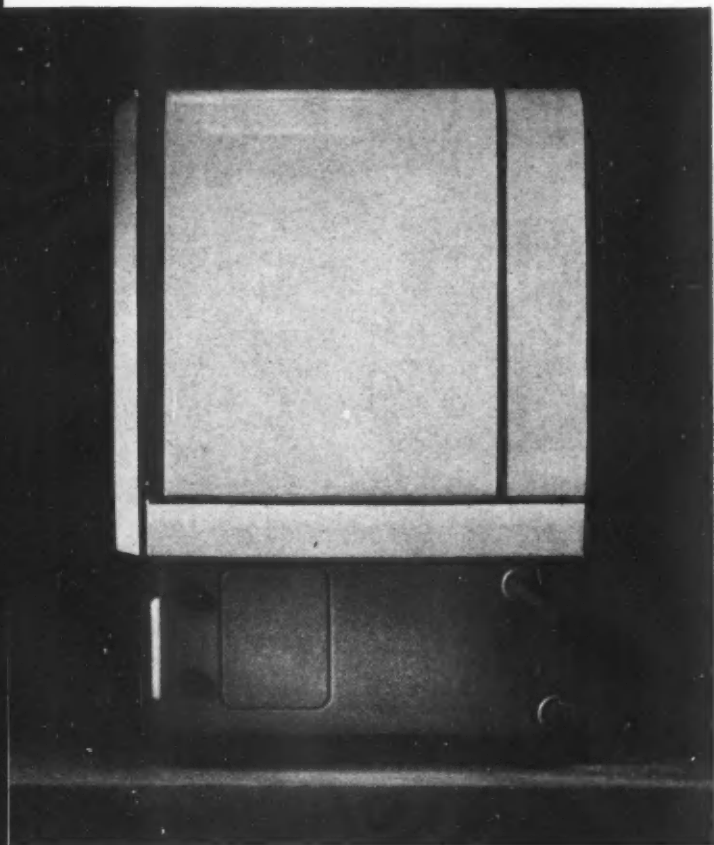
DESIGN ANALYSIS 19

Dishwasher

L. BRUCE ARCHER

DESIGNER *Robert J. Gilson* MAKER *Charles Colston Ltd* PRICE *£89 5s*

The dishwasher may well become the next essential kitchen appliance. New to the market is the Colston, which was chosen for this analysis because it is distinguished by a marked originality of conception. Two examples were used for testing under home conditions, and the author has based his assessment on reports from the two families concerned, his own examination of these and other examples and the comments of Donald Anderson, a human factors consultant, as well as on results obtained by other users. Comments from the manufacturer are on page 62.



1 The interior of the *Colston* has been arranged to accommodate the range and quantity of plates, cutlery, etc., which arises (according to a Colston survey) from the main meal of an average family.

Less than one per cent of the households who could use a dishwasher actually possess one. Yet the chore of washing dishes is the most frequently repeated and one of the most disliked of all household tasks. Small wonder that some people in the domestic appliance business judge that the automatic dishwasher is next on the boom list and that its prospects for mass sales are as wide as the present distribution of the suction cleaner and might be as spectacular as the recent rapid growth in popularity of the spin drier. These were the prime reasons why, when Sir Charles Colston decided to re-enter the domestic appliance business under his own name (he had been a director of Hoover Ltd for 35 years and chairman for 17), he chose to begin with a dishwasher. A further consideration, no doubt, was that in the current scramble for diversification which is going on in the British domestic appliance industry, the automatic dishwasher seems to be one of the very few products for which there are less than 40 or so competitors in the field already.

The arguments in favour of increasing sales of dishwashers are certainly impressive. Most of the other laborious and irksome jobs about the house have been mechanised, and after the introduction of the fully automatic clothes washer, the automatic dishwasher seems a natural sequel. Indeed, whereas the laundry is washed only once or twice a week, the dishes are washed three or four times every day, so that the manufacturer who can provide a really efficient automatic dishwasher can be forgiven if he anticipates that housewives will press forward eagerly to buy it. The purchase of such a machine is a tempting proposition for the hostess entertaining without evening help, for it promises to enable her to switch on the washing up and rejoin her guests for coffee. Similarly, the young professional woman and the mother of a young family must both be impressed by the thought of switching on and walking away. How closely does the *Colston* live up to this ideal?

Function

The key questions are – Does it wash well? Does it wash everything? Can you *really* switch on and walk away? The answers to the first two questions, at any rate, are not simply 'Yes'. The experience of two ordinary users seems to suggest that the *Colston* washes some things, such as cups, saucers, plates, forks, spoons, glasses and shallow dishes well – better than most housewives habitually achieve by hand, in fact. This is not really surprising, since the machine pours the equivalent of 600 gallons of hot water and detergent over the crocks during the cycle of one wash and two rinses. Only one gallon of fresh water is actually drawn from the tap for each of these three, but the water is filtered, heated and circulated within the machine at the rate of 60 gallons per minute.

However, there are some vessels, such as bowls and ovenware, which it does not always wash well, and there are other things, such as large saucepans and frying pans, which the machine will not accommodate at all. Admittedly the company does not mention saucepans in its sales literature but most people must surely feel that it is the pots and pans and dirtiest dishes which they would like to have taken off their hands – not the lightly soiled cups and

Design analysis

saucers which could be rinsed under the tap. In fact, small saucepans *can* be washed in the machine provided they are carefully positioned.

In the normal course of evolution one expects that dishwashers will adapt themselves to accommodate awkward dishes and that dishes will adapt themselves to dishwashers. At the moment, most of the troubles encountered are due to the shapes of vessels designed without the dishwasher in mind. The *Colston*, like most dishwashers (there are 11 makes about in Britain), works by hurling hot water at the dishes. To obtain a scouring action the water has to strike the dishes with the highest possible velocity, without throwing them about, or creating too much noise.

The technique is thus to project small jets or streams of water droplets across the interior of the machine. Unfortunately jets cannot go round corners, and lightweight droplets do not bounce very far. Consequently there may be 'shadows' in deep or awkwardly shaped vessels, where the jets do not reach or where the water does not strike at a good scouring angle or with sufficient velocity. For similar reasons there are some foods, such as macaroni, rice and other cereals, which are so soft that they absorb the kinetic energy of the small droplets without being much moved themselves.

It is asking a lot of any dishwasher to expect it to wash lightweight wine glasses and heavy frying pans at one and the same time. One solution to this difficulty would be to provide the machine with two settings giving different lengths of washing cycle, one for heavyweight and one for lightweight articles. Although the *Colston* has only one setting the user can get round the problem by putting oven dishes and small saucepans into the machine as soon as they are used, letting them wash as well or as badly as they will, and then finishing them off by hand *after* the meal while the normal dishwasher load is being processed. Even a heavily soiled dish which has been only three quarters cleaned by the machine is a lot more pleasant to

wash by hand than the dish in its original state. Sometimes a heavily encrusted or burnt pot will come out amazingly clean except for a barely touched 'shadow' at one side. This falls short of the exuberant suggestion that the age of 'switch on and walk away' has really arrived, but it also discounts the equally extreme view that because a dishwasher does not wash everything well, it is not worth having.

Safety

Some housewives have grave misgivings about appliances which are connected to both electricity and water mains. The *Colston* dishwasher has been skilfully designed to ensure that these fears are unfounded. The motor, motor switch, heater and heater switch are the only electrical devices in the machine. All the timing gear, water valves and inter-locking safety devices are mechanically operated in order to keep the electric side as isolated as possible. The machine switches itself off if the door is opened while it is in operation. The heater cuts out if there is insufficient water. So far as the dishes and cutlery are concerned, too, there would seem to be little danger of ill effects to anything except certain cheap thermoplastics or some cutlery handles, which can be badly buckled, especially if the machine is connected to a hot water supply which is much in excess of 140°F. The user is warned not to allow the detergent powder to come into contact with silver.

The *Colston* dishwasher is being marketed with an extensive and intensive sales force similar to that which made Hoover Ltd famous under Sir Charles Colston, and has been designed to lend itself to easy servicing in the home by Colston representatives. The fact that the mechanism is divided into unit sub-assemblies to permit quick replacement should go a long way towards ensuring that unexpected weaknesses and teething troubles are overcome, even for consumers who have bought the earliest models. The machine is certainly intended to be durable. The

2 and 3 In design for human factors the *Colston* is not so good. In the awkwardness of the typical British kitchen, the door handle, **2**, is seen to turn the wrong way for comfort, and the



sharp catch inside the top of the cabinet, **3**, tends to scratch the user's arm. Typically awkward pots and jugs are not always easily accommodated, or well washed.



John Garner



4, 5, 6 and 7 The Colston does not fit all draining boards, 4. If fitted on the only alternative worktop at the other side of this kitchen, 5, it takes up valuable working space, and such positioning demands running hoses across the room or needs

special plumbing. On a working height of 36 inches it is high for a woman of above average height, 6. It requires special fixing if placed under a shelf and the discharge pump will raise water only some 26 inches above its tank.

three or four models which were examined by DESIGN appeared to have been very competently designed and well made, except that in three cases the vitreous enamel of the casing betrayed weak spots, inside and out.

Human factors

An appliance which saves effort, such as a floor polisher, or an appliance which produces an effect not achievable by hand, such as a refrigerator, can still be a success even if it is not ideally designed for convenience in handling. An appliance such as a dishwasher, however, which is intended to save time and labour must be extremely convenient in use or the consumer will quickly revert to the old ways, which have acquired the deftness of habit. Moreover, when such an appliance is intended for the mass market its efficiency must be viewed in the context of the whole man-machine-work system of small kitchen usage. Sparkling dishes are not enough. A dishwasher design might fail because it monopolises space, or the kitchen tap, or a range of dishes at the wrong moments, or because its use demands too much planning and foresight. Colston engineers have foreseen many of the requirements for ergonomic efficiency. Front loading, with pull out trays on runners, is superior to most of the old top loading designs involving lift out trays. The drop down door catches the drips from plates and dishes during loading. The machine is automatic, taking in, heating and discharging water and employing forced hot air for drying. But some disadvantages are illustrated here.

The design is based upon the result of a market survey which attempted to discover the type and quantity of soiled crockery and cutlery produced by the average family at the end of its main meal. The families who used the machines for DESIGN – one catering for three adults and a child and one catering for two adults and two children – found that it was often necessary to use a second wash to clean such inevitable extras as jugs, bowls

and small saucepans. It is too easy, of course, to demand the impossible and ask for a machine which is bigger on the inside and smaller on the outside. Compromise may simply mean inadequacy on both counts. The Colston is designed to stand on the draining board of a standard sink unit, on the portable stand which can be provided with the machine, or it can be boxed in under the work top. It can draw its water from either the hot or the cold tap, and discharges into the sink. The inlet hose is provided with an ingenious plug-in attachment. One might wonder how much further a manufacturer could go in making things easy, but nevertheless the top shelf is too high when the machine is mounted on the draining board and in this position the machine occupies too much space in the kitchen just where it is most valuable. When placed beneath the work top the racks are easier to load and the machine does not take up valuable working surfaces. However, this requires a special supporting framework and cut-out front panel which would mean calling in a carpenter or handyman. This, and the fact that the design of the Colston clearly suggests that it was conceived primarily as a free standing appliance, would be enough to deter the majority of purchasers from having it built in. Yet an appliance designed to go under the work top has such obvious long term advantages that it is felt that more attention could have been given to this aspect of the problem.

Another feature which will make some users chafe is the length of time which a washing cycle takes. If the inlet water is already hot, the period is 25 minutes. If the inlet water is extremely cold, the cycle might be twice as long, as the mechanism slows to bring the water to the correct temperature. When the load is only teacups this seems like cracking a nut with a sledgehammer. The answer, of course, is for the user to load crocks into the machine as they are soiled, and to wait until the machine is full before switching on. The dirty things are out of sight, and the machine is quite a compact store for crockery in any

case. Nevertheless this practice demands a somewhat larger stock of dishes and a modified pattern of home storage and usage. Although the hose can be detached from the tap during the washing cycle, the consumer will find it inconvenient to use the tap during this period unless she gets the plumber in to tee-off the supply. Once again, an alternative short cycle for lightly soiled dishes would have overcome the difficulty, but a solution which Colston has not intentionally provided.

Yet the timing mechanism can be cheated, for it is possible to advance manually the start knob so overriding the washing-rinse cycles. However, the start control has been made hard to grip and uncomfortable to advance manually, presumably, to support the Colston slogan – “switch on and walk away”.

Cost

Are housewives in the mass going to find this machine sufficiently appealing to be willing to pay almost £90 for it? Colston calculates that each wash costs a little under twopence for hot water, detergent and current. The special Colston detergent costs 7s 6d for 2 lb and should last six or seven weeks. The special wetting agent costs 7s 6d a sachet and should last 230 complete washes. A household which has £90 to spend might well think that it would do better to buy a twin sink double drainer stainless steel sink unit with automatic waste disposal at much

the same price. On the face of it, one might judge that a dishwasher with the present limitations would have to sell at about £60 to reach a mass market. Perhaps Colston will eventually get down to such a price. The firm claims to be operating at a profit already in some regions, if not in the United Kingdom as a whole, despite having been on the market for considerably less than a year.

Style

The design of the machine was primarily the responsibility of Robert Gilson, the firm's chief designer and development engineer. For some reason Colston is shy of admitting that it has made use of the services of an industrial designer, although one was employed to produce some outlines for the proposed machine “in the early days”. Nevertheless the very high standards evident in the technical design are not matched by a similar standard of appearance for the machine lacks an overall visual unity. There are details such as the door handle and the motor switch which are coarse and ill proportioned, although the manufacturer appreciates these shortcomings and is planning improvements. The frontal outline looks like another example of the quartic cliché, but it can be justified by internal functional requirements. On the whole, however, the absence of clutter results in a favourable general effect which undoubtedly tends to raise rather than depress current achievements in this type of product.

The manufacturer's comment

We welcome the fact that *DESIGN* has selected the *Colston* for review and are obliged to the author for the compliments he pays to it.

The *Colston* is the brainchild of Sir Charles Colston, who has spent a lifetime designing and marketing domestic appliances. The design and production of this machine have been at least as thorough and as painstaking as for the many other successful products with which he has been connected.

Your readers may like to know that, before the *Colston* was put into production at all, we conducted intensive research to find exactly what type of machine was most needed, and what price people could afford. There followed over six years of practical research and development work in our test laboratories. After that the machine was thoroughly tested in 75 households representing a cross-section of the market as we knew it to exist. Only when we were certain that the *Colston* matched up to the demands of the most exacting housewife was it released to the public.


We make these points because some of your author's criticisms might suggest that our design was the result of guesswork rather than science. As it is, the *Colston* has met a most enthusiastic reception from both public and trade. We are more than satisfied with the results, and consider that they support the thoroughness and efficacy of our preliminary planning and development work.

The space allowed does not permit us to answer Bruce Archer on all points of detail. As one example, however,

Mr Archer implies that the machine would not be built-in in many homes. In fact, the machine has been built in by many users, but is mainly designed for the housewife who wants to operate it on a draining board, working top or trolley. Research indicated to us that most potential purchasers were in the latter categories, and our sales have corroborated this.

In an article in your August issue, Mr Archer himself said “... if a product is to be considered good industrial design it must appeal at the point of sale and it must be profitable at the point of manufacture, as well as being functionally and aesthetically acceptable at the point of use”. The demand for the machine indicates that it *does* appeal at the point of sale; the *Colston* is profitable at the point of manufacture, and we are convinced that it is functionally and aesthetically acceptable at the point of use... in short, it is good industrial design.

Some of the illustrations seem to imply a singular lack of intelligence on the part of the housewife, as while the *Colston* was primarily designed to sit on the draining board facing into the room, it can equally well be placed on any surface with an area not less than 17½ inches wide by 15½ inches deep – the base measurements of the *Colston* – or on its specially designed trolley. By having the machine facing into the room, as it was designed to do, two other objections are overcome – the door handle is then easily accessible and loading is normal. (Editor's note: 2, 3 and 4 show *Colston* dishwashers as installed by Colston's technical service manager.)



HOTELS



GILLIAN NAYLOR

Between 1946 and 1958 only two major hotels were built in Britain; within the next two years, however, there should be at least 17 important new hotels in operation in the London area alone, with several more in the Provinces.

Four of these have already been opened – the *Skyway* at London Airport, the *Keirby* in Burnley, and two small 'resort' hotels – the *Island Hotel* at Tresco, and the *Spittal of Glenshee* in Scotland. This show of confidence, however, does not mean that there is any lessening in the problems that face the hotel industry. These are extremely complex; the most obvious – the cost element, the slow and not always predictable return on capital invested, the seasonal ebb and flow of occupancy, the lack of good commercially produced equipment suitable for use in hotels, and the problems of staffing, maintenance and service – were fully discussed in *DESIGN*'s special issue on hotels two years ago (*DESIGN* 109); since then the situation has not radically altered. Indeed, in spite of increasing demands for hotel accommodation, some experts would still claim that, with present building costs estimated at between £3,000 to £8,000 per room, a new hotel is an uneconomic proposition.

Nevertheless there are individuals and groups (American and Canadian as well as British) who are prepared to take the risk. They are for the most part, building hotels to meet specific requirements, with definite 'markets' in mind. The Canadian financed *Skyway*, for example, is geared to cater for and entertain the traveller in transit, and the *Keirby* is designed for the business man who may wish to use the hotel as an extension to his office, or as a place to entertain his associates.

The bedrooms in these new hotels are usually small, but each has its private bathroom and storage fittings are generally custom

built to make the best use of available space. The restaurants, bars and public areas are planned to cater for the casual visitor, the occasional conference and banquet, as well as the resident.

The same trends apply to most of the newly converted hotels which are as important and as impressive as the new buildings. In fact many of the conversion schemes have set a new standard in hotel design in this country. Dreary and obsolete hotels have been completely replanned so that each room has its bathroom, built-in fittings and modern furnishings, with the public areas redesigned for greater flexibility. The British Transport Commission, with its 36 hotels and 15 years' post-war experience of converting inconvenient and cumbersome property, has proved that conversion can pay good dividends – last year its hotel trading profits were for the first time over £1 million (*DESIGN* 140/25).

Success of this kind proves that the odds are not entirely against the industry. The present boom in new hotels and conversions will no doubt continue, but will lack of money or misunderstanding of the problems involved prevent the industry from meeting today's requirements? Government subsidies may help, and, at a different level, more positive co-operation between the industry and manufacturers of furniture and furnishings for hotels. As well as an acknowledged dearth of designs suitable for use in hotels, there is also not sufficient information available to architects and designers on the specific requirements of the industry. In order to tackle this problem the CoID has set up an advisory committee of hoteliers who have been working out the basic requirements for such items as beds, dining tables and chairs. Its recommendations will be available to the trade early next year, when they will also be discussed and illustrated in *DESIGN*.

LANCASHIRE
The Keirby



George Hesketh, consultant
for the interior design
of the *Keirby* hotel

It is notoriously difficult to find adequate hotel accommodation in the various industrial centres outside London, and yet the *Keirby*, in Burnley, is only the second major hotel to be built in the Provinces since the war. Like its predecessor, the *Leofric*, it is financed by a brewery – in this case Massey's Burnley Brewery Ltd. The *Keirby* cost £350,000 to build and equip; it has 46 bedrooms, each with its own bathroom, two penthouse suites, a ballroom, a restaurant, two public bars, a residents' cocktail bar, and an underground garage. The furnishings were selected by G. R. Hesketh, an interior designer with his own shop in Burnley.

The *Keirby*, which serves an expanding industrial area, is naturally first and foremost a business man's hotel, although the management hopes to attract the tourist in transit to the Lake District and the Yorkshire Dales.

In comparison with the more sophisticated treatment of the reception areas the bedrooms are disappointing – a pointer to the fact that there are few designs on the market suitable for use in this kind of hotel. They are, however, small and compact, with a specially designed storage unit which doubles as a dressing table and a desk. Dictating machines, television sets and secretarial staff are available, and the penthouse suites are planned to be used for cocktail parties and conferences.

The furniture and furnishings in the public areas are mainly chosen from stock patterns, and they have been imaginatively selected. The tables in the dining room fit together for banquets, the bars are pleasant and unpretentious, and details such as lighting fittings and door furniture have been carefully considered.

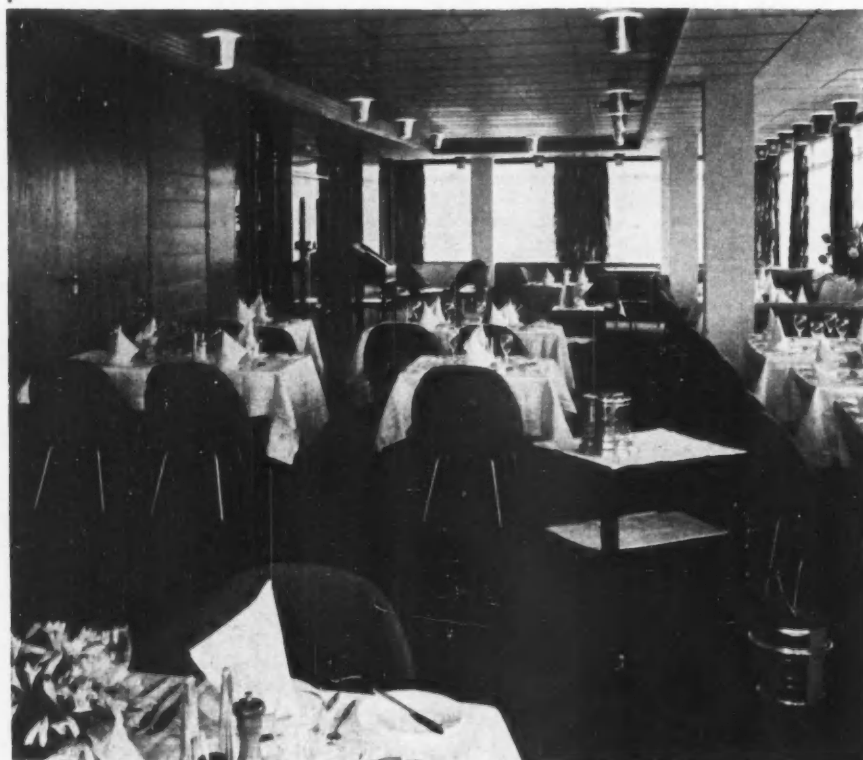
The *Keirby* is probably the only hotel to commission a designer to co-ordinate all its graphic material. The registration form, the 'Do not disturb' sign, the menus, the stationery and a symbol have all been designed by James Main, who was recommended to the management by the CoID's Record of Designers.

ARCHITECT *H. Hubbard Ford*

INTERIOR DESIGNER *G. R. Hesketh*

MAIN CONTRACTOR *The Howarth Construction Co Ltd*

1



2



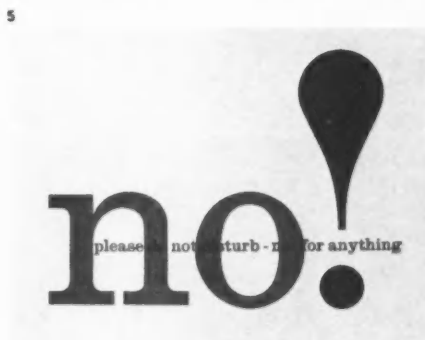
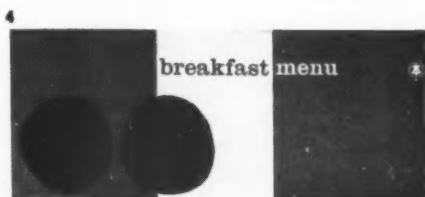
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1 The dining room.

2 Part of the residents' lounge, adjacent to the dining room.

3 The *Square* bar, open to the public, as well as to residents.



4, 5, 6 A selection of the graphic material specially designed for the hotel by James Main.

SCOTLAND

The Spittal of Glenshee



Ian Burke, RIGHT, and Hugh Martin, the architects, who were responsible for the design of the *Spittal*.

7 Part of the lounge area.



The *Spittal of Glenshee* is in many ways one of the most interesting of the new post-war hotels. It is small, with accommodation for about 40, and within their very limited budget (the hotel is privately owned and financed and cost about £35,000 to build and equip), the architects, Ian Burke and Hugh Martin, have broken away from the traditional conception of hotel design in this country.

They have deliberately avoided lushness and luxury without sacrificing comfort, or attention to detail (the cutlery, for example, is a modern British stainless steel pattern, and the door furniture, light switches, etc, well chosen).

Most of the ground floor is taken up by the dining room, reception and lounge areas, designed to an open plan. There is underfloor heating in the dining room which has large double glazed windows, and an uncarpeted floor; the chairs and tables are sturdy and straightforward and the curtains are in subdued colours. The lounge area is also uncarpeted, with custom built bench seating and a large open fireplace. The curtains and upholstery are in warm reds and blues, in contrast to the local pine and stone which has been used extensively in this area.

The bedrooms are small, (the architects estimate their cost at about £300-£400) with two or three beds in each, built-in storage and a wash-basin; bathrooms and lavatories are separate. In addition to the 12 bedrooms there are about half a dozen rather primitive rooms with bunk beds designed for the more ascetic skier or pony trekker.

There is also a cocktail bar, a recreation room and a television room - in each case the architects have used unpretentious furniture and appropriate fabrics to emphasise the informal atmosphere.

The architects have concentrated on appealing in the first place to a young and active age group; the hotel will no doubt be used by all manner of tourists, but it is primarily designed as a base and social centre for skiers and pony trekkers; within this context the architects have produced a positive and unconventional solution to one of the problems of hotel design.

ARCHITECTS Ian Burke and Hugh Martin
MAIN CONTRACTOR George G. Farquharson

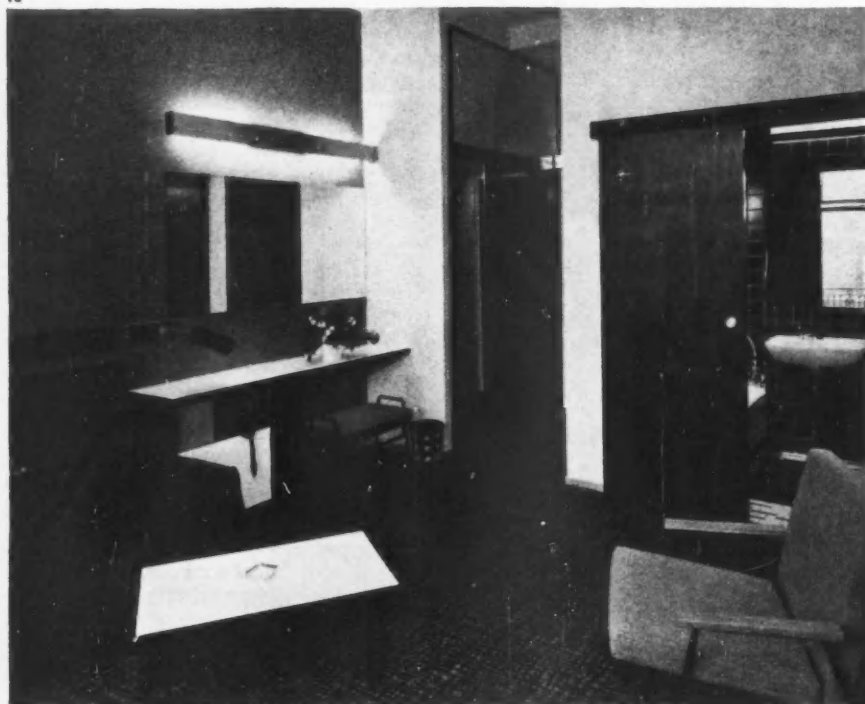
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SCOTLAND *continued*

8 The dining room.

9 The exterior; the bedrooms are in the wooden extension.



LONDON

The Londoner

The *Londoner* is the ninth hotel that the Washington Group has taken over in London since 1952. Schemes for the first eight have involved extensive modernisation of what were in many cases obsolete and anachronistic buildings; since the group retains a full time architect, Glen Rees, the approach to the problems that each hotel has presented has been individual and yet consistent.

The *Londoner* is built on the site of the *Welbeck Palace Hotel*, a white elephant which had become hopelessly uneconomic to run. In this case the group decided to reconstruct the hotel completely; seven storeys and all the interior partitions in the old building were demolished and only the façade was retained. There were 86 bedrooms in the *Welbeck Palace* and these have been replaced in the new layout by 124 new ones, each with its private bathroom. These rooms are designed to be lived in – there are studio couches instead of the conventional bed; the bathrooms and built-in wardrobes are shut off by

10 One of the bedrooms.



Glen Rees, architect to the Washington Group of Hotels.

11 A lounge area adjacent to the entrance.



12



12 The entrance.

13



13 The banquetting suite.

sliding doors; the wall fittings are designed by the architect to the group to incorporate, as well as usual storage space and luggage racks, radio and television, *Reditune* (Associated Rediffusion's equivalent of *Musak*), and a control panel so that the user can adapt the heating and ventilation system to his own requirements. Other items of furniture and furnishings are taken from manufacturers' standard ranges.

The entrance area, with adjacent lounge, cocktail bar and telephone booths, leads straight into the

banqueting room, which has a floor area of about 5,000 sq ft. This is ingeniously designed to divide into three separate rooms, which can be used for conferences, exhibitions, etc, giving the flexibility that is essential in the town hotel if it is to cater for the business man as well as the tourist. The tables are free standing, but they can be locked together for banquetting purposes. There is also a restaurant on the lower ground floor.

The hand of an expert in hotel design is apparent throughout the *Londoner*; Mr Rees now has eight

years' experience working for the group, and he has complete control of the interior schemes. Every detail is considered, and there are few jarring notes, such as the automatic cigarette machine, the odd notice or dreary filing cabinet that tends to creep in when the architect moves out. And yet, in spite of its sophistication, this is a practical hotel, with intelligently planned bedrooms and spacious and adaptable public areas.

ARCHITECT *Glen Rees*
GENERAL CONTRACTOR *Bovis Ltd*

TRIENNALE

MICHAEL FARR



overseas review

This year the Italian organising committee decided that the *Triennale* should embody the theme *Home and School*. Looking back on the series of triennial exhibitions, of which this is the twelfth, the committee agreed that there was a danger that the *Triennale* might become an academic establishment uncommitted to current social problems. This was a reasonable conclusion, but this time the Italian Government's school reform programme, launched by Signor Fanfani, provided an opportunity to build a theme on firmer foundations. The committee therefore aimed to show how the theme might be worked out for the benefit of all three groups of the population: rural, suburban and urban. The whole first floor of the exhibition building was set aside for Italian work; other countries were invited to follow the theme in their own exhibits which covered the bulk of the ground floor.

Yet in the event the theme proved to be little more than a vehicle for showing new designs – the stock in trade of all *Triennali*. It is true that the Italian section, guided mainly by the architects Ignazio Gardella and Vico Magistretti, contained many long notices elaborating the social and town planning problems that are to be faced in any programme of renewal. It is true also that Italian school furniture (the best of it by the Palini company) claimed the attention as never before. But there was no evidence of any radical investigation into the problems of home and school design. Instead, throughout a long series of sunken, life size, single storey house layouts and a generalised group of classrooms, the visitor was invited to see a kaleidoscope of styles, each one different for the sake of being different. Although this meant that the Italian section of the *Triennale* had reverted to its normal role of encompassing the individual outpourings of its native designers, the extent of their stylistical reversion was anything but normal. *DESIGN* will discuss and illustrate examples of this Italian work in December.

Thematic exhibitions are not easy to do. If the message is to have a profound impact then it is essential for complex data to be co-ordinated and simplified – in the case of the *Triennale* the data was absent from the start. A theme such as *Home and School* – if it is a theme in name only – becomes just a handy tag for publicity and has no

overriding effect on the exhibition. That is how all 'foreign' countries took it with the exception of Britain and Mexico.

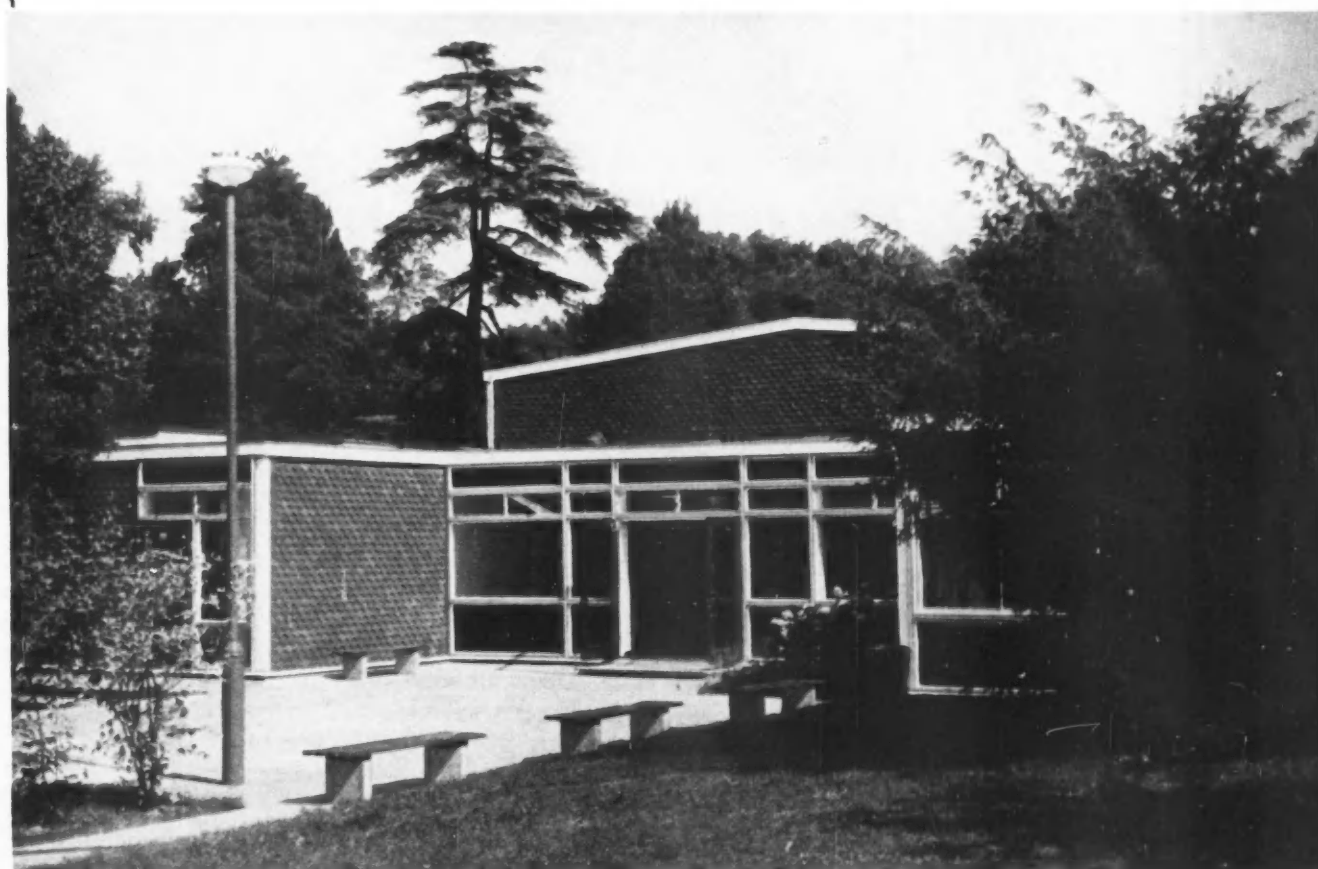
British school brings prestige

The Ministry of Education in collaboration with the Nottinghamshire County Council took the initiative to build, on a site near the main exhibition building, a complete three-class primary school. For the general visitor's interest the furniture and equipment was left almost as if the children had gone out to play a few minutes earlier – their voices could be heard on recordings played through loudspeakers in the park outside. For the specialist, various parts of the building's anatomy were cut away to reveal construction, insulation, services, etc. The school has captivated all-comers, and particularly the Italians who have been generous in their praise. Britain's interpretation of the school half of the theme (the home was understandably missing for the Ministry of Education had to act alone) was literal. It could afford to be. What problems there were in a three-class primary school had been solved in the years following the war; contemporary interest is focused on the architectural interpretations. Apart from the achievement of great prestige, the exhibit has also proved itself to be a successful trading venture; a company has been formed to build these schools in Western Germany, using the working drawings and information sheets of the CLASP system of construction. (CLASP, the Consortium of Local Authorities Special Programme, includes nine local education authorities from the Midlands and the North, and the Scottish Education Department.)

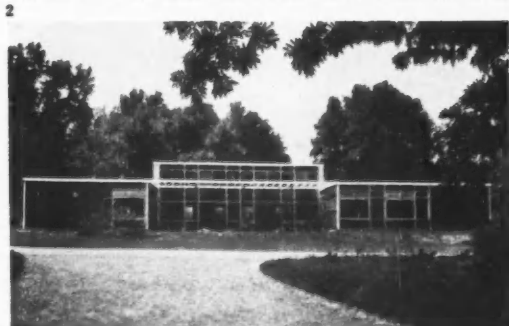
On the ground floor of the main exhibition a small display, designed by James Gardner, introduced the British exhibit. Flanking it on either side were the following foreign sections: Austria, Belgium, Czechoslovakia, Denmark, France, Finland, Germany, Holland, Japan, Mexico, Norway, Poland, Sweden and Switzerland, as well as small displays from the Royal College of Art and the Hochschule für Gestaltung, Ulm. Generally, the section exhibits were display cases for new designs on the market and so afforded the triennially rare opportunity to assess progress.



In this first of two articles on the Milan Triennale, the author discusses the British contribution and picks out some of the products from other countries which show how designers are variously tackling common problems. The next article, to be published in December, will consider the current Italian movement in furniture design. The symbol for this year's Triennale, designed by Roberto Sambonet, is shown LEFT.



Michael Fox



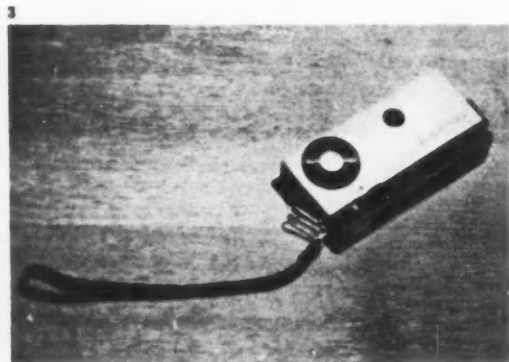
1 and 2 The main entrance to the British School and a view from the side. The school was built by the Ministry of Education and Nottinghamshire County Council (county architect, W. D. Lacey). In the forecourt stands a 15-ft Atlas lighting column, a 1960 Design Centre Award.

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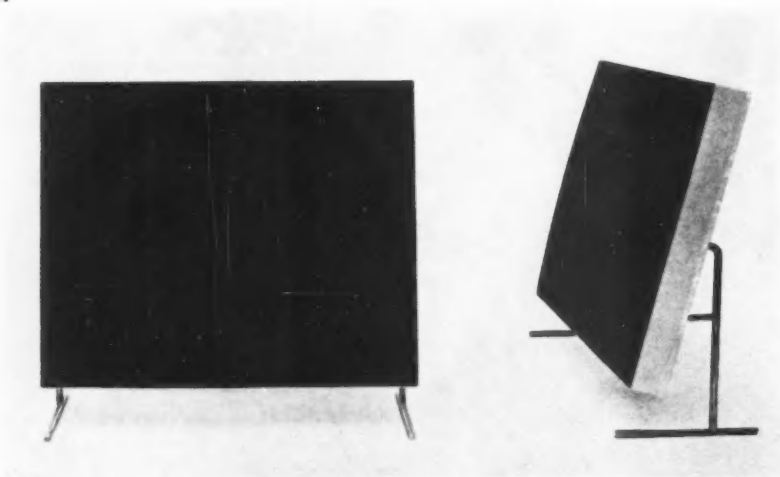
3 Japan Miniature camera by Yashika Co Ltd, was an effective reminder of Japan's ascendancy in this industry.

4 and 5 Germany Max Braun electrical products dominated the West German Section. Outstanding was the stereo equipment shown here with its electrostatic speakers.

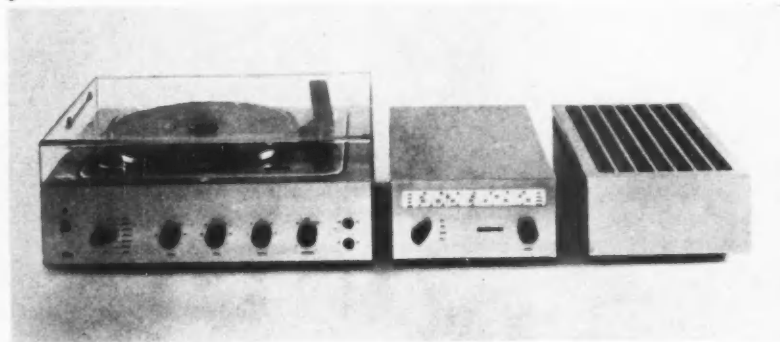


6 Japan An earlier version of this Ricoh Synchrofax recorder, designed and made by Riken Optical Ltd, was shown in Brussels in 1958 (design 116/53). The machine records on sheets of paper the undersides of which are sensitised. On the top surface can be printed drawings, diagrams and other visual information relevant to the recording. During the playback the sheet is placed in a frame on top of the machine where the visual information can be readily seen.

4



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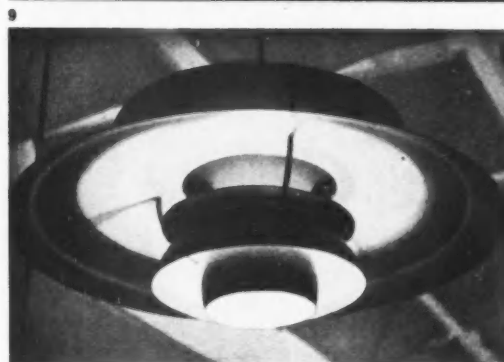


7 Japan Portable, battery operated television receiver with transistor circuitry and eight-inch picture tube, designed and made by Sony Corporation.

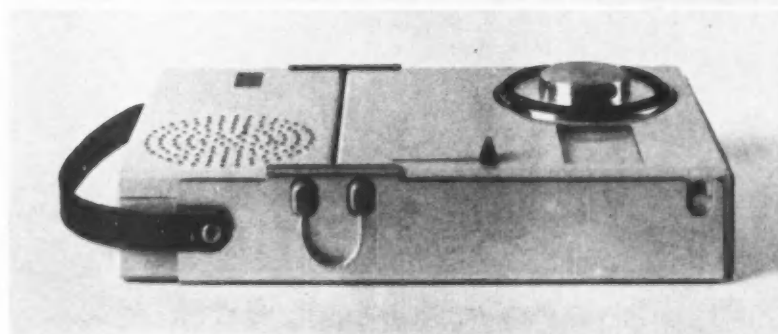
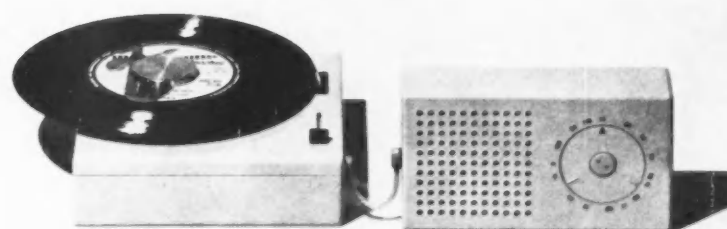
8 Finland New glass lighting fittings designed by Lisa Johansson-Pape for OY Stockmann.

9 Denmark A pendant fitting in aluminium that compared well with the Fulford Brown Brothers model L55 (design 137/44-48), designed by Paul Henningsen for Louis Poulsen & Co A/S.

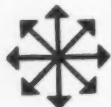
10 Germany Another of Max Braun's outstanding designs is this battery operated, pocket size, combined radio and record player - only $9\frac{1}{4} \times 6 \times 2$ inches when the two parts are coupled together for carrying, below. The stylus rests on the underside of the record; the radio covers short, medium and long wave bands. Dieter Rams the designer is on Braun's design staff.



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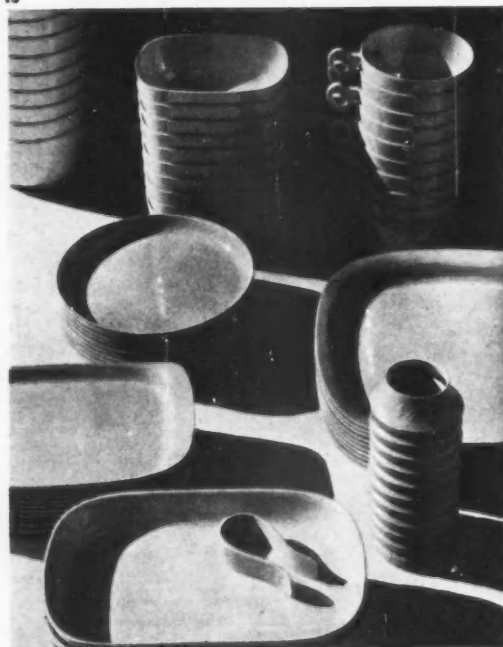
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14



11 Austria Attenuated shapes strive for too much effect in this set by Fritz Lischka for Österreichische Keramik AG.

12 Sweden Fluted porcelain coffee service by Sylvia Leuchovius for AB Rörstrands Porslinsfabriker.

13 Sweden Scandinavian Airlines System uses these designs by Sigurd Persson; plastics by Norplasta (Norway); pottery by AB Gustavsberg Fabrika.

14 Czechoslovakia A resemblance to Rosenthal designs by Tapio Wirkkala is marked in this coffee service by Václav Šerák for Karlovarský porcelán.



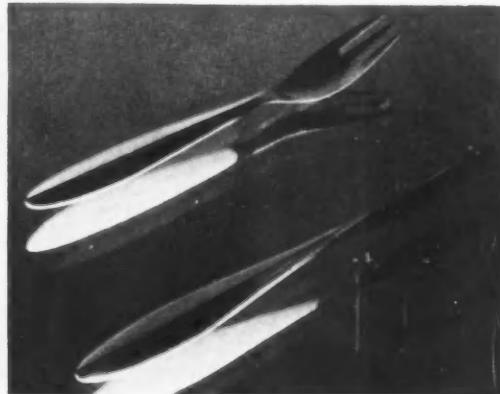
15 Germany A section of the West German display. The table (*foreground*) by Harald Roth for Casa GmbH exhibits Chinese revivalist tendencies, also to be found in some recent Italian work.

16 Poland Some radical thinking is shown in the shaping here by Andrzej Wroblewski (*bottom*), Olgierd Rutkowski (*top left*) and Enid Cieslar (*top right*); two of the knives recall the experimental designs produced at the Manchester Regional College of Art (DESIGN 124/49-52).

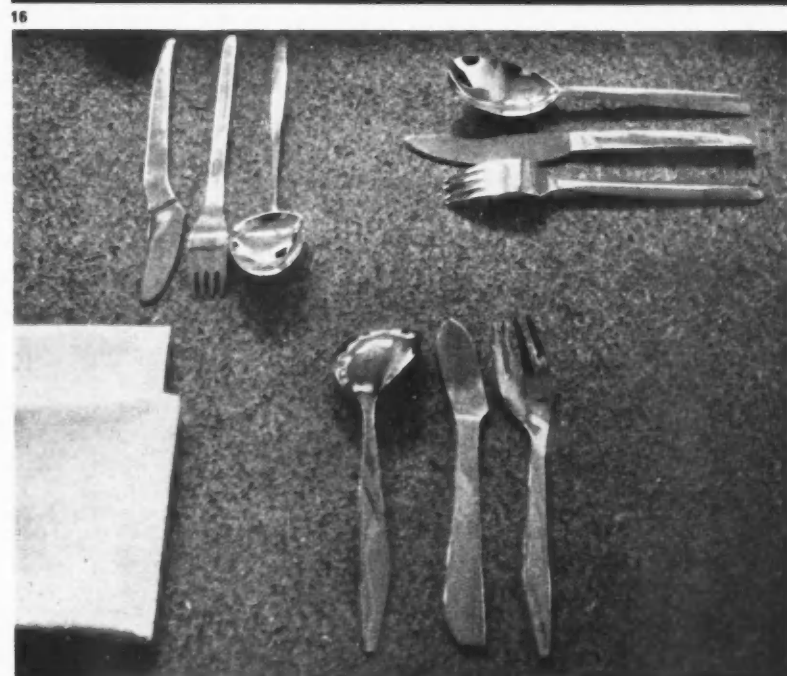
17 Czechoslovakia Stainless steel cutlery by Vladimír Fleissig for Mikov shows an elegant simplification for the knife.

18 Denmark The notched decoration is a refreshingly new treatment for stainless steel; designed by J. H. Quistgaard for Dansk Designs.

17



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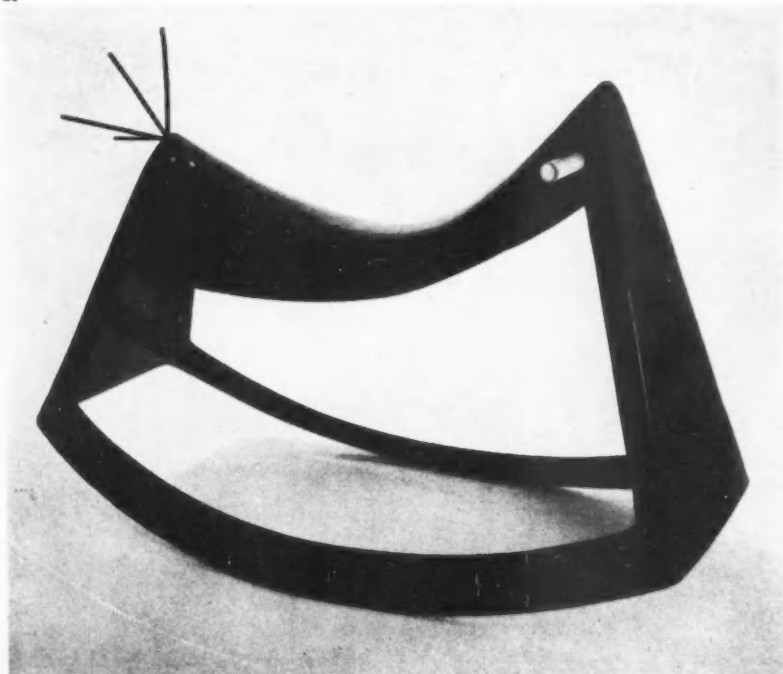
19 Japan School furniture with chairs, designed by Sori Yanagi, moulded in glass fibre. The desks, which have book lockers down one side, were used to display a variety of optical equipment.

20 Germany Plastics rocking horse made by Wilkahn, Wilkening and Hanske.

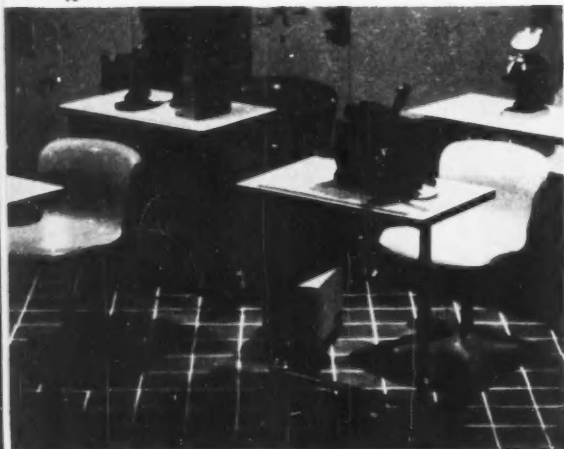
21 France Cane chair by Janine Abraham and Dirk Jan Rol for the Comité de Propagande du Rotin.

22 Mexico Metal teacher's desk with suspended book rack by Ernesto Gómez Gallardo for the Administrative Committee of the Federal School Construction Programme.

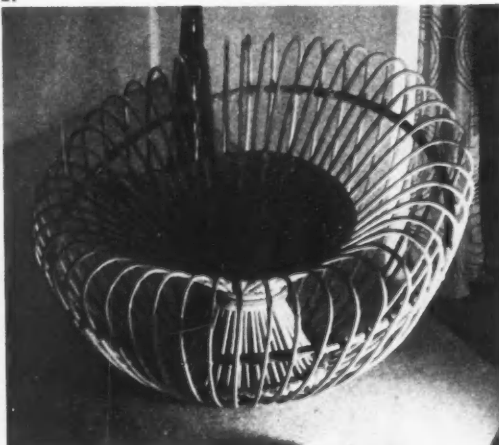
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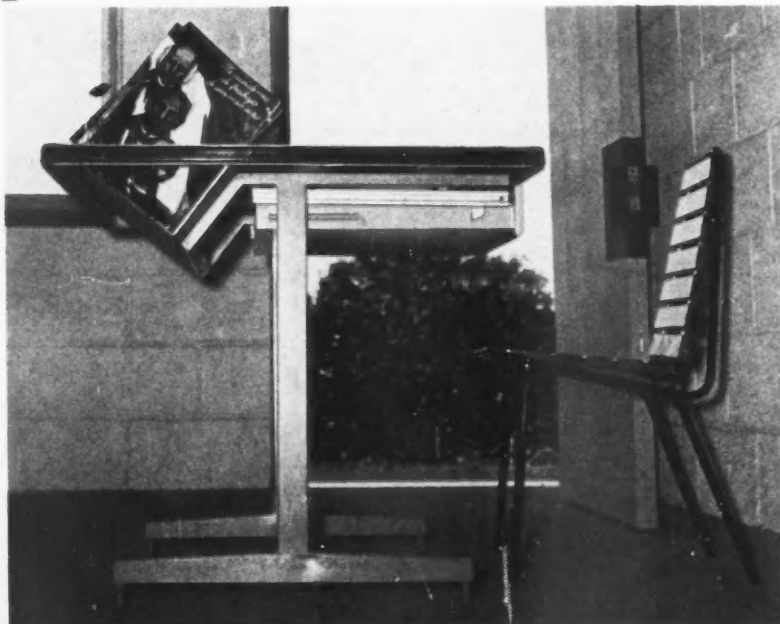
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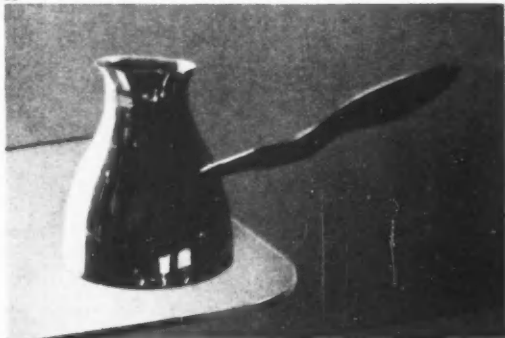
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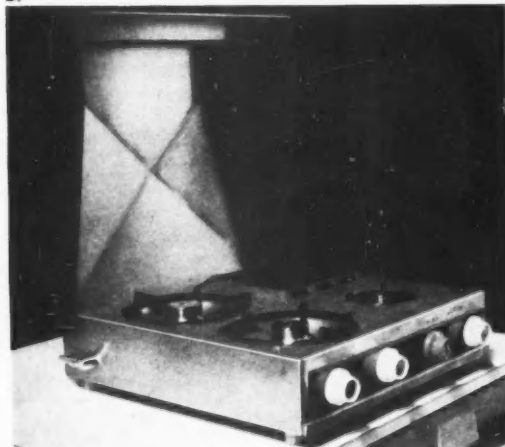
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23 Czechoslovakia Coffee vessel in copper with anthropometrically eye-catching handle in palissander; designed and made by Eva Havelková-Linhartová.

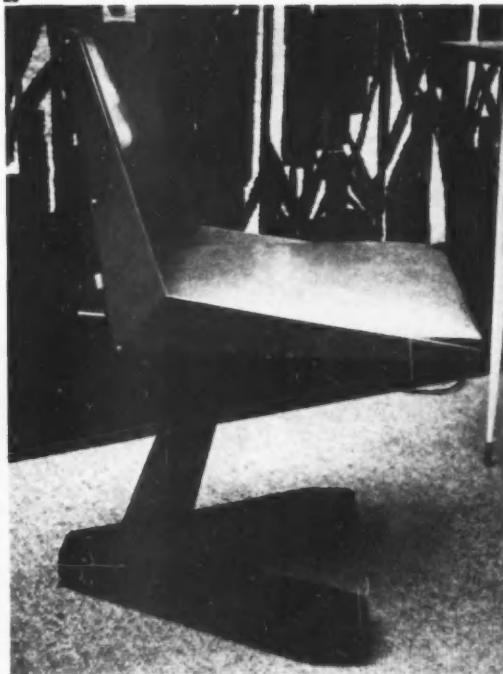
24 Italy Portable gas stove, when compared with an earlier model also at the *Triennale*, shows the influence of Marcello Nizzoli's *Diaspro* styling.

25 Austria This desk chair by Norbert Schlesinger for Karl Trakl with a folded aluminium seat and back recalls the new McCobb furniture DESIGN 133/59.

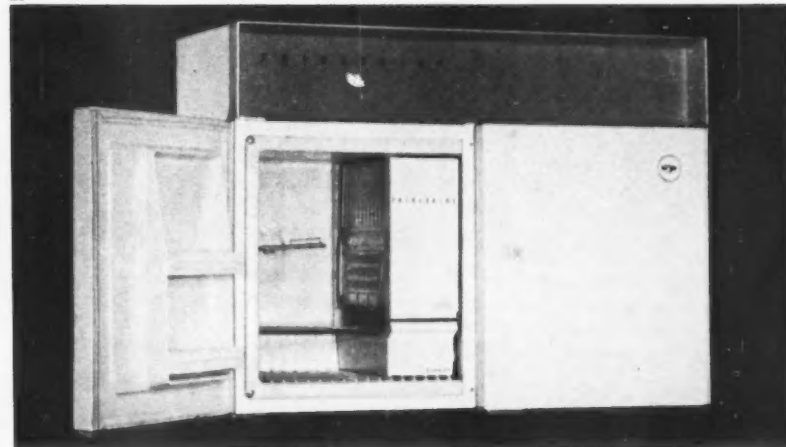
26 France Wall-mounted refrigerator by Roger Tallon of Technès for Frigidaire.

27 Germany Chair of stainless steel tubes socketed in two steel balls, with black leather seat and back. Designed by Paul Schneider-Esleben for Hans Kaufeld.

25



26



27





Japan

Image of our century

PETER SMITHSON



Delegates from nearly 30 countries met recently in Tokyo to take part in Japan's first World Design Conference (WoDeCo, for short). The theme set by the organizers was "Our century: the total image – what designers can contribute to the human environment of the coming age". In the following report the author, who was one of the speakers, discusses the way in which this ambitious subject was tackled.



Peter Smithson, addressing the conference.

The conference certainly satisfied its organisers' hopes in one respect. It was a *World* design conference – of the part of the world, that is, which is in active communication already – with the exception of those South American countries where one supposes they are too busy designing to wish to talk (or even perhaps think).

Participants were as widely separated by climate as Erskine and Doshi; by methods as Maldonado and Soriano; and by intention as Yamasaki and Kahn. The alphabetical list was sprinkled with the names of the 'design establishment', from Albin and Bayer near the beginning to Tunnard near the end.

The aim of the conference was to study the future image of the modern world – an ambitious aim, and one which probably no method of work could hope to grasp firmly. Faced with the system of seminars and panel discussion

titles, it seemed impossible to understand what the conference structure was, and most seminarists ploughed doggedly through the piece they had prepared in advance which they hoped would mesh in with what their fellow seminarists had to say. Most did not, and with statements (some good in themselves) spinning off tangentially from the supposed subject, any true deployment and extension of ideas by follow-up discussion was impossible.

Concepts compared

This was a pity, for it is highly probable that the objects that we are so painfully devising may be the wrong ones and it is a good thing every now and then to let other specialists into our private world to see if their specialisation makes our own irrelevant or, what is more probable, produces a mutual modification of concepts. It is



Herbert Bayer, *left*, talking to Hiromu Hara, Japanese graphic designer.

Tomás Maldonado



Hans Schlegel the second British delegate to the conference, spoke on the subject of design education.

particularly obvious, for example, in the case of cars and signs and roads and buildings, that the underlying concepts are wrong, and it is quite mad to think in terms of styling and not in terms of change in the total living pattern, not in any philosophical sense, but pragmatically as things affect the use of other things.

It was my brief to report here on the most interesting themes which were *followed up* at the conference. I regret there were none. But curiously enough on the last day when one moved about freely saying goodbye to people one had come all this way to see and had rarely spoken to (for the seminar organisation tended to put like specialists together), there was a common feeling that a small working design conference could actually be directly valuable if it tackled some extremely concrete project.

For example Jean Prouvé talked at this conference about the mechanisation of the building industry. But the walk-ups and bungalows that he showed as the products of his thinking and his factory were the sort of building types which would reproduce the sort of town which we know to be inadequate. A seminar at which the idea of the *total* obsolescence of many present building types was thrown at the constructors would almost certainly lead to something useful.

The same holds for household equipment which at present seems only to prop up a way of living which is exhausted, when it could point to a new sort of living pattern. These are examples of extremely concrete problems which it was generally agreed could be discussed by people from different disciplines with definite hope of results.

The Japanese were wonderful hosts. Kenzo Tange wrote before the Conference "that it is difficult to say why this *World Design Conference* is going to be held in Japan," but I am sure that in the backs of their minds, along with the other very good reasons, was the desire to show us what they themselves had done. And I for one am glad to have seen it.

Extracts from two papers are quoted here because they seemed to me to raise particularly important issues.

Herbert Bayer, *American designer*

"Although mass analysis today always concludes on a mental level of the lowest common denominator, the communication science must eventually grow up to utilize its ingenious techniques toward progress and for the improvement of life. The designer is not here only to please himself, and for the designer of the future it is not to reject science as an imposition, but to strive for a collaborative function in a balanced relationship . . . The divergence between good design and design which sells must be terminated and must make way for a synthesis. This is one of the important tasks of the immediate future."

Mr Bayer went on to list some of the pertinent issues for which the designer must clarify an approach:

"The understanding of contemporary design (must be studied) in relation to aesthetic values of tradition and history. Especially the architect must learn to cope with the problem of incorporating new structures into an existing setting.

"The designer's range of influence will grow farther with ever larger quantities of production. National characteristics will be less and less pronounced.

"Many aesthetic values are being created by collaboration of large working teams. The complexities of production in the motion picture industry, in advertising, in architecture will demand new awareness and understanding of collaborative work.

"The use of standardization must be understood beyond today's confusion where we standardize when individuality is called for and vice versa.

"Quantity can no longer remain the dominant criterion. We must learn to accept and create nothing but the best and strive for higher quality standards, instead of idolizing the idea of quantity."

Tomás Maldonado, *educator*

"In certain areas of production very fundamental changes are taking place, which tend to sharpen the problems of the relations between communication design and industrial design. When we take a look at the most recent history of instruments, apparatus and appliances we see that in a very appreciable percentage, perhaps in more than 30 per cent of the cases, transformations occur which are not just physiognomic as is commonly supposed, but also structural. These transformations are characterized - in very general lines - by a tendency towards atrophy of certain control organs and by a tendency towards hypertrophy of the display organs. In other words: the zones of action or manual control decrease in size and the zones of visual and acoustic perception increase. If this process continues, and everything seems to suggest that it will, the task of the industrial designer will become more and more a task of design of information displays, ie more and more a problem of communication.

"It becomes continually more obvious that the function of the industrial designer or at least of a good industrial designer will no longer be to design a product, but a system of which the product is only one member. I refer to the man-product system or, as it is called in human engineering, the man-machine system. Now, when we cease to be interested exclusively in the product and begin to question the nature and functions of the total system to which the product belongs, we shall come to the conclusion that the man-product system is no more than a communication system. It is a system in which certain information is being received in a determined order to facilitate certain predetermined operations.

"The gap between theory and practice of visual communication can only be overcome in the future if the designer will decide to fulfil his task with the aid of the methods and knowledge of the science of communication. For this purpose however, it will be necessary that the designer admit that his task is essentially communicative and only peripherally artistic, rather than the reverse. He must also admit the existence and legitimacy of objective communication, ie he must cease to believe that persuasive communication is the only form of communication."

Germany

Showroom for furniture

There is a growing awareness that the best of the modern furniture designs deserve an equally modern approach when it comes to display. However, very few commercial concerns would go as far as Pesch KG of Cologne, and virtually create a separate business in order to provide a suitable platform for well designed furniture.

Pesch operates a large retail furniture store in one of the principal shopping streets of Cologne; it features both German and imported designs. The proprietor, Josef Pesch, felt that the best international examples required a setting of their own, divorced from the inferior and presented under the best possible conditions. From this idea came Intermöbel — a new showroom, further down the street from the main store.

The showroom is basically an open area which highlights the furniture without detracting from its character. By placing groups of furniture in a neutral but attractive setting the prospective customer can visually appreciate the design without being influenced by its surroundings. In other words, there is no attempt at 'dressing' the furniture with accessories or providing room settings. Nor is furniture intermixed, although it is possible to see more than one group at a time. The few accessories that are used have been selected with the same care as the furniture. The examples of well designed furniture on display are the result of constant searching and careful selection from designs made in any country.

Josef Pesch commissioned a young Swiss architect, Werner Blaser, to design the showroom. As architect and client were in sympathy, there was little to cause disagreement and the result is undoubtedly one of the best settings for modern furniture to be found in Europe.

ROBERT SPARK

1, 2 There is no division between the showroom and the full-height window. Entrance is on the right. The staircase, visible at the rear, leads to an upper balcony which can be used for discussions with clients. It also provides display space for a limited range of carefully selected accessories. Walls are simply painted white, except for the one at the rear which has wooden panels. The floor is of Italian white marble. Fluorescent tubes concealed behind translucent panels in the ceiling provide general illumination, the ceiling being broken up by suspended wooden frames incorporating black fabric panels. Visual barriers consist of alloy panels erected as broad slats which can be set at any angle. Wall units belong to a range which Pesch makes to order. They not only demonstrate the design, but are also used to house literature, swatches of leather, fabrics and so on.

3 An envelope from the firm's stationery range. Especially interesting is the way in which the 'r' has been combined with the 'm' in the logotype. All stationery used at Intermöbel, from invoices to swing tickets, has been specially designed by Gerstner & Kutter of Basle. It admirably reflects the care taken in ensuring that every detail is in keeping with the basic conception of the showroom. Even the style in the laying out and typing of correspondence is distinctive.



Reports

Carpets: the design problem

Designers from nearly all the carpet manufacturers in Scotland met at a conference held at the Scottish Design Centre recently to discuss problems of design with representatives of the four schools of art in Scotland. Sir Alastair Young, chairman of James Templeton & Co Ltd, was in the chair.

Many Scottish carpet manufacturers have found it increasingly difficult to recruit designers, and it was thought that a re-examination of the requirements of the industry might lead to some solution of the problem. Recruitment has, in the past, largely been made from the secondary schools. Entering the industry at an early age, these recruits receive a specialised technical design training lasting as long as five years, without any basic design training at a school of art. Design standards within the industry have much improved in recent years, but few people would doubt that there is still a great deal of progress possible, and a better system of recruiting designers must surely help. It was in these circumstances that the CoID Scottish Committee decided to hold this half-day conference.

LACK OF LIAISON

In his paper, the director of the Glasgow School of Art, D. P. Bliss, deplored the lack of liaison between the industry and the schools of art. He claimed that the problems of design in the industry could largely be resolved if recruits were given a sound and comprehensive training, partly at the schools of art and partly in the industry itself; the one providing the aesthetic approach and the other the technical knowledge required. While the schools could provide both, he felt that techniques were better taught by industry since there were variants in individual cases, and the schools could not always boast of the latest developments in equipment. He assured the delegates that the art schools would do anything in their power to breach the chasm between them and the industry, since they were in full realisation of the need for closer collaboration.

J. Galloway, director and chief designer, William C. Gray & Sons Ltd, was firmly in favour of the present system of recruitment for design staff, which, he thought, was working satisfactorily. He felt that the introduction of diploma students from schools of art would have a disruptive influence on the design studios. On the question of salaries, he pointed out that it would not be possible to pay an art school trained designer the same salary as an apprentice who had been with the firm for five years.

MARKET REQUIREMENTS

Speaking for the manufacturer, A. J. Jack, director, A. F. Stoddard & Co Ltd, said he sympathised with the call for higher standards of design, but felt that the profit motive and providing the public with what it wanted had equal importance. On the question of requirements for varying markets, Mr Jack said that reproduction and floral work had been best sellers, but that he conceded the need for better colour and design to satisfy a small minority of customers.

A lively and controversial discussion followed. Delegates from the industry maintained that the

training given in art schools was unrealistic and divorced from the requirements of industry. Points in answer to the challenge by the industrialists were that the training given to students carried many into other industries where they were able to fill key design appointments after their graduation. One delegate suggested that it might be appropriate for the industry to set up a post graduate fellowship, which would allow students to take an advanced course in design and carpet technology. Further suggestions for the improvement of design standards were that the day release scheme should be more widely used to train the apprentice designers and that evening classes in technical and art schools should be encouraged.

JOHN LUCAS

The older worker

DSIR is issuing an interesting new series of booklets entitled *Problems of Progress in Industry*. The seventh in this series, *The Older Worker and His Job*, by Hilary M. Clay (HMSO, 1s 3d) reviews recent work on the subject of ageing workers. The booklet gives an admirable, clearly written summary of our present knowledge. Some of the information given is of considerable importance to designers, as well as to the executives and officials to whom this series is more directly addressed. Four relevant items are speed stress, short-term memory, translation problems, and accidents.

The older workers (that is those over the age of 40, who form 50 per cent of the working population) find it difficult to keep up with the demands for speed, particularly in tasks which are paced by the machine. If, however, the machine or the working situation can be designed with some degree of flexibility in the timing of the work, such as the 'buffer stages' commonly found on conveyor lines, then the difficulties may be lessened and older people may well be able to maintain their output.

Short-term retention of what has just been observed often deteriorates. But in order to supervise a group of men or a number of machines, the man in charge may have to 'keep tabs on' many developing situations over a wide area; he will not be able actually to see them all at once and will be forced to rely in part on his memory. Again, a man at a monitor console, controlling for instance a mechanical plant or a power station, may make adjustments the effects of which are delayed for some minutes. If he does not remember accurately what adjustments he has made, and no displays are available on the machines showing him what he has done, his later actions may well be faulty if his memory is deteriorating. This effect may also happen when any operator is considerably fatigued; the correct solution is often in the hands of the designer.

As the world grows more complex, so the operator is often removed further from the actual situation he is controlling. The more remote he is from the actual situation the more he may have mentally to translate or alter information in some way before he can take the appropriate action. This kind of process may be more confusing for the older person and certainly takes him longer to learn. Clearly anything in the design of the equipment which increases the mental load with extra translation processes increases the difficulty, and disproportionately more so for the older person.

Accident statistics show that in general older workers tend to have fewer accidents, but they are more liable to have particular types of accident, especially falls, or blows from falling or moving

objects. Also deteriorating eye-sight undoubtedly increases accident risk, particularly where the lighting is not very good. Obviously there is much scope for the architect and the designer to ensure good design of buildings, workspace, lighting and other environmental conditions.

These summarised examples from what is already a summary may give a fair picture of the important material in this booklet. To present in such a condensed form the major facets of present knowledge on this problem of ageing, together with some useful suggestions for practical improvements, deserves much praise and many readers.

BRIAN SHACKEL

Safety at home

The Interim Report of the Committee on Consumer Protection (HMSO, 1s) was published recently. It covers the safety of all consumer goods, and refers in particular to electrical appliances and fittings, space heaters, flammable clothing materials, toys, and toxic and corrosive substances in domestic use.

It is encouraging that the committee finds no evidence on any widespread scale of the sale of goods which have not been made as safe as reasonably practicable, and finds that in general manufacturers have a "high sense of responsibility and safety consciousness". But there are some exceptions to this rule, and to deal with present and future defaulters it recommends legislation empowering the Home Secretary to prohibit the sale of any class of goods thought to present an undue risk of personal injury. It proposes that such powers should be used in respect of some portable paraffin heaters, of imported electrical apparatus with misleading colouring of connecting wires contrary to the British Standard colour code, and that this may also apply to the insulation of 'live' parts of electrical appliances, to the labelling of electric blankets and of flame-resistant fabrics whose finish may be affected by bleaching, to electric toys and their transformers, and to toys made of flammable materials.

These proposals are admirable, and in detail meet most of the existing sources of danger. The recommendation for still further research into the safety of oil heaters, for example, even beyond the revised British Standards, is welcome. But no recommendations are made to reduce accidents from other types of heating, though portable fires are at present only required to be safe against fleeting contact with the element, and solid fuel fires need have no protection. Why not demand that all new fireplaces be designed to accommodate a standard guard?

There is a welcome suggestion in the report that all plugs and sockets should be standardised, so that electrical appliances could always be sold with plugs attached. This would obviously be an added safeguard as well as a great convenience.

If the recommendations of the report are carried out they will ensure that the products we buy are safe if we know how to use them, and I am glad to see that the legislation would also cover instructions and warnings where special precautions were considered necessary. No certification mark is advised, and clearly if everything on the market were reasonably safe no official safety mark would be needed. It is only if the recommendations are not taken up that some such mark would be of the greatest value to the public. There is already a bewildering number of seals, awards and approval marks, and the committee is at present investigating their merits. Until the final report is issued we are advised to view these with caution.

DOROTHY MEADE



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TBW/129

Prototypes for product design

The illustrations show a selection of prototype designs produced by third year students at the LCC Central School of Arts and Crafts, and the Royal College of Art. The work from the Central School is by students in the Department of Industrial Design, and the projects were designed and made up under the direction of Douglas Scott. The Royal College selection is by students in the School of Industrial Design (Engineering), now under the direction of Professor Misha Black.

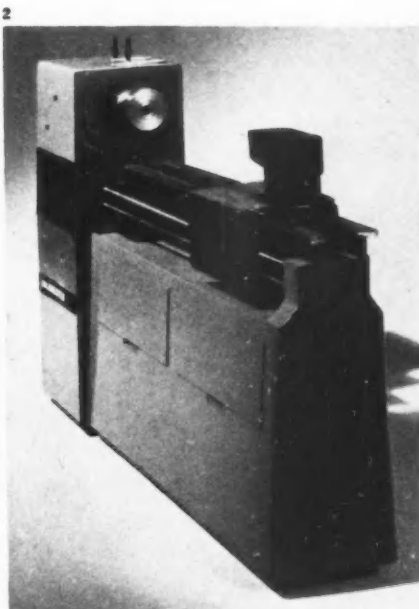


Central School

1 Model of a portable transistor radio with plastics body and aluminium controls. DESIGNER *David Wheeler*.

2 Redesign of a lathe that is used in the school workshop. The brief was to clean up the appearance of the machine without altering the existing mechanism. DESIGNER *Peter Keevil*.

3 Remote control microfilm reader for hospital use, a new instrument which has been designed and produced in model form in liaison with Micro Methods Ltd. The body is in moulded glass fibre, the base slides under a bed, and there is a small motor with pre-set speed and 'on and off' switch controlling both motor and lamp. The whole instrument can be dismantled and packed away when not in use. DESIGNER *John Wickham*.

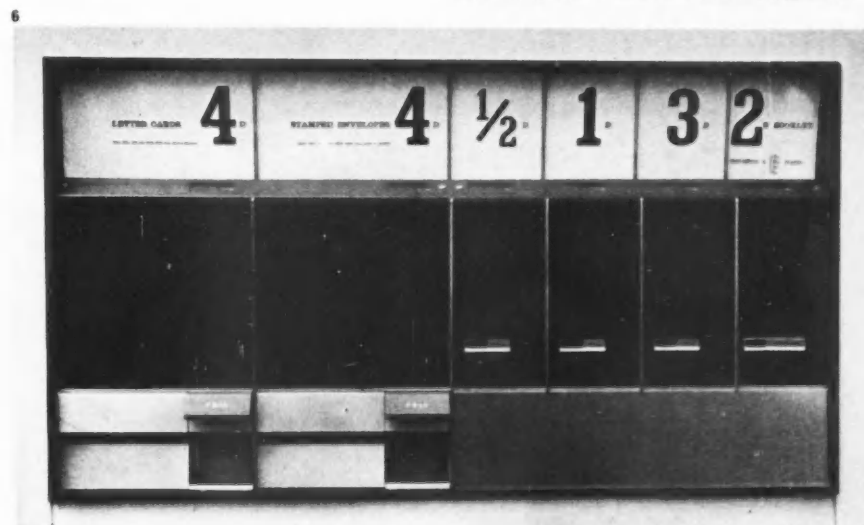
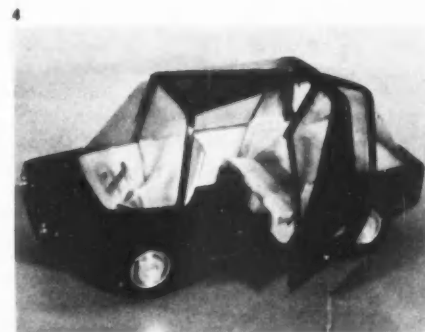
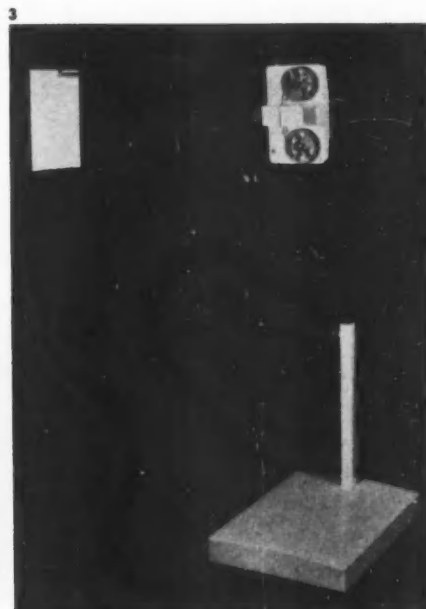


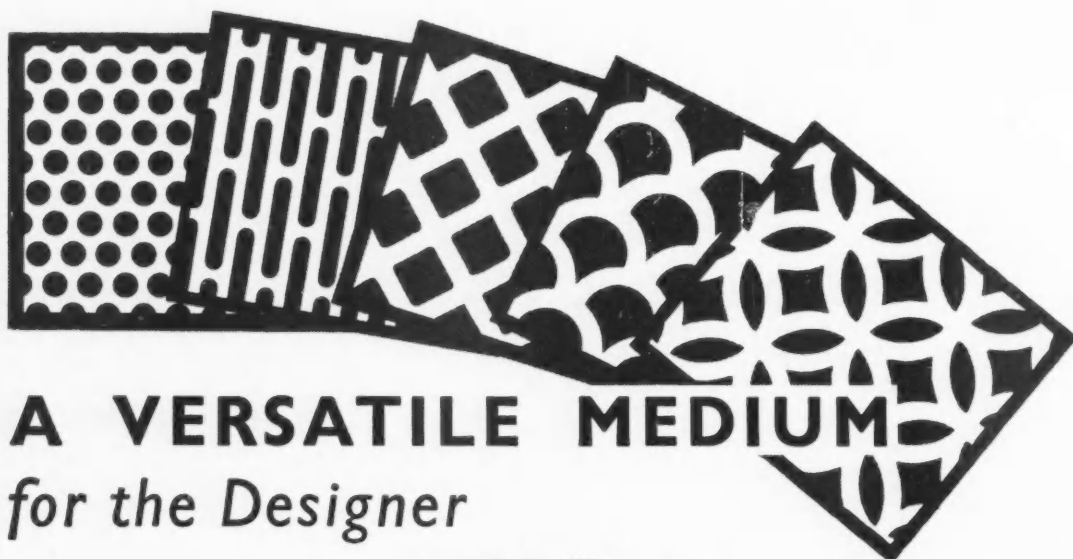
Royal College

4 A model of a two-seater taxi electrically powered by a fuel cell. The doors, which hinge backwards, are operated by the driver by remote control and a space for luggage is provided alongside the driver. DESIGNER *P. F. Ralph*.

5 Collapsible orthopaedic tricycle, sufficiently robust for road conditions and at the same time light enough for use about the home. The folding is operated by a rotating mechanism beneath the seat. DESIGNER *K. G. Sadler*.

6 Stamp vending machine, using the standard GPO mechanical parts. The panels are in coloured Perspex and are illuminated from the rear. The machine recalls the accident insurance equipment designed by Douglas Scott (DESIGN 124/38-42). DESIGNER *K. G. Sadler*.





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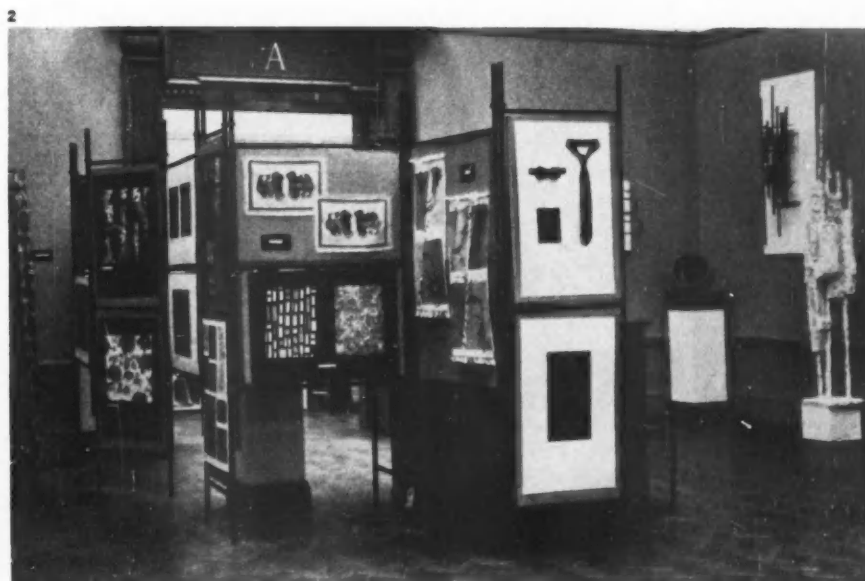
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Miscellany



Student and professional

The annual exhibition of students' work from the Newcastle College of Art and Industrial Design was held in the Laing Art Gallery recently, **2**. This year the exhibition was held in conjunction with a photographic display of the 1960 *Design Centre Awards* (in some cases the photographs were supplemented by the products themselves lent by manufacturers), and an exhibition of work by Design Research Unit, **1**, which has offices in Newcastle as well as London. One outstanding characteristic of the students' work was the practical attitude to the design problems which they had been set, and the methodical way in

which the solutions were presented. The most lively ideas were, appropriately enough, in the fashion section. (One would have expected this original approach to be reflected in the printed textiles, but they were of a much more routine character).

Many of the designs for furniture showed that the students were well able to devise successful results, not only in wood, but also in metal and other materials. This concentration on a thoroughly methodical attitude to design produced a good general level of design, but while avoiding the depths, the tendency to miss the peaks was also apparent.

However, the broad policy of the school has been proved successful in the number of awards won by the students last year (three full RSA bursaries, and 11 commendations, out of a total of 37 entries).

It is obviously of great value both to the art school and to the people of Newcastle to be able to compare, within the same exhibition, the work of these students, with the high professional standards of such an experienced industrial design team as Design Research Unit, and also with a group of distinguished products selected for *Design Centre Awards* by the CoID.

J.N.W.

Vans and caravans

Forward control layout is used increasingly in light commercial vehicles. In this type of design (the Commer 8-seater station wagon, **3**, is a good example), the driver sits above and even slightly forward of the front wheels, while the engine is mounted between them, its cover frequently forming part of the front seat. All the space behind the front wheels can then be used for the load carrying body, whereas in those light vans adapted from private car designs the load space is restricted. The driver, placed right at the front of his vehicle on a seat more upright than that of a car, enjoys a far better view of the road ahead. In addition he can enter or leave his vehicle easily from either side.

Until recently motorised caravans have been built by converting or modifying existing vehicles. But in the new Commer range a caravan, **4**, is included which is fully equipped with sink unit, Calor gas cooker, seats that can be converted into beds, etc. It has a 'rising roof,' although this is not as large as on some of the van conversions. Either a petrol engine - basically the Hillman *Minx* 1494 cc with lowered compression rate - or a Perkins four cylinder compression ignition engine of 1621 cc is available.

There is no doubt about the good forward visibility from the driving seat, which is aided by the slender windscreen pillars; but the rear vision mirrors are small and of plain glass which seriously restricts the usefulness of the near side mirror.

The use of a conventional layout in all popular British light vans, with the engine at the front driving the rear wheels via a propeller shaft, makes a high floor inevitable. This in itself is no disadvantage where the van is used for, say, carrying bags of cement because they are easier to pick up from a height of two feet than from, say, one foot. But for a motorised caravan such as the Commer, a lower floor would be better because it would allow the caravan to have sufficient headroom without recourse to the somewhat clumsy expedient of a rising roof.

Many Continental light van constructors use a forward mounted engine driving the front wheels together with independent rear suspension. Rear wheel arches may intrude into the body space more than in a conventional van but this is a minor disadvantage. The eight-seater, petrol engined caravan, **4**, costs £915 including tax.

J. B. DAVEY



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PROJECT

Copying cunningly

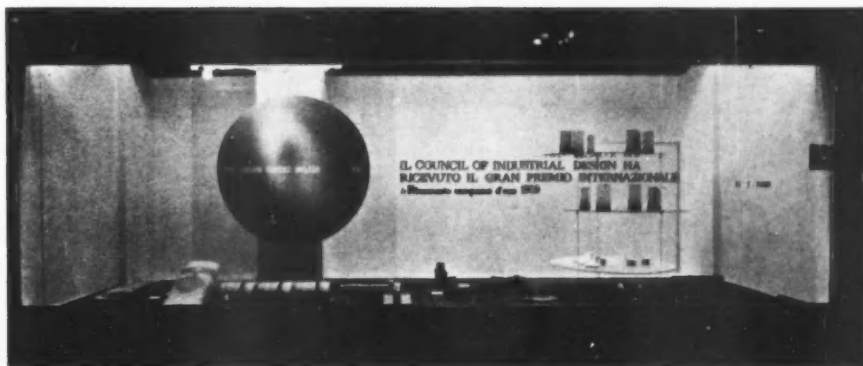
Abram Games has been practising magic in his 'small back room' during the last six years. However, the result – the Imagic Process – has nothing to do with the black arts, but with physical and technical observations. As Mr Games puts it: "according to expert opinion, this shouldn't work at all". The invention which Mr Games and his assistant, Stanley Godsell, are poring over, **BELOW**, is a fast, economical and versatile copying method; fast, because even on this 'test bed' model copies can be run off at 60 ft per minute; economical, because it will copy printing, etc, on even low grade tissue paper which does not have to be prepared in any way; and versatile for, if you want to copy single or double sided originals which are opaque or translucent on to paper, plastics sheet or film, rubber, glass, ceramics, metal, foils or fabrics (black, or in colours), you can do so.

How does it work? At the moment Mr Games prefers not to say. But he believes that no one has ever before applied the simple basic principle on which it operates to a copying device. The machine's action is simple: plug into the mains (it consumes no great power), set a control, press the start button and feed in the material to be copied. Out comes the copy at high speed, delivered dry and permanent. The minute amount of materials which are needed in the process are "inexpensive and readily available – nothing elaborate", says Mr Games.

The results are excellent and your correspondent can certainly vouch for the claims of high speed copying, and dry delivery. Before the writer at the moment there are three copies of pages of text together with a reproduction from a glossy photograph. In three months they do not seem to have faded or deteriorated in any way.

There are few things to defeat the Imagic Process. According to its inventor, it could be designed to copy in a flat-bed version, and large machines could be built for drawing office use. Many other industrial applications are being developed. The principal operating costs are for unsensitized paper alone,

Abram Games, RIGHT, and Stanley Godsell, with a prototype of the new copying machine.



Awards and accolade

La Rinascente, a leading department store in Milan, recently staged this window display of the 1960 Design Centre Awards to mark the award of the Gran Premio Internazionale Compasso d'Oro, 1959 to the CoID. This

international prize is given annually by La Rinascente for "an outstanding achievement in industrial design". Paul Reilly, director CoID, will be at the presentation ceremony in Milan this month to receive the Golden Compasses.

quarto copies averaging 1/4d each. This represents a considerable reduction over other known copying methods.

It is to be emphasised that development of this new process is still in its early stages. Many large firms which specialise in copying devices or computer read out systems are interested in this excellent system, of which more will surely be heard. **M.J.B.**

PEOPLE

New practice

John Lunn, until recently senior associate with Gaby Schreiber Associates (DESIGN 135/65), is now practising as a free lance design consultant. He was industrial designer to British European Airways for five years, and before that was in charge of the furniture and display section at the LCC.

His office address is now 18 Southampton Place, London WC1.

Head of design

John Kingsley Cook has been appointed head of the School of Design and Crafts at the Edinburgh College of Art. Mr Cook joined the staff of the college in 1939, and after war service most of his time was devoted to building up the Graphic Design Department. He studied at the Royal Academy Schools, London, and in Paris and Rome.

Paperback director

Hans Schmoller, who joined Penguin Books Ltd in 1949 as typographer and became head of production in 1956, has recently been made a director of the company.

New faces for the firms

David Harris has been appointed consultant designer to the English Sewing Cotton Company Ltd. He has designed a house mark symbol for international use by the firm, and is now going on to produce a house style, which will include letter headings, invoices, share certificates, calendars, etc. Future projects include the design of packaging for the firm. (This appointment was made through the CoID's

Record of Designers.)

Mr Harris has also been appointed design consultant to the John Perring group of companies. He will work in liaison with the group's display studio, staff architect and advertising agents to formulate a new design presentation for the organisation.

EXHIBITIONS

Street furniture

A permanent exhibition of street furniture which has been accepted by the CoID's Street Furniture Panel opens on the South Bank site (adjoining County Hall) on November 10. Exhibits will include lighting columns, litter bins, shelters, etc. The exhibition will be featured in a later issue of DESIGN.

British engineering in Toronto

The Board of Trade and the Engineering Centre are organising an important British engineering exhibit for the *Canadian National Production Show*, which is to be held in Toronto from May 8 – 12, 1961. This exhibition is held every two years and has the support of Canadian and American firms concerned with all types of engineering production. Further details are available from the Engineering Centre, Stephenson Place, Birmingham 2.

At home ...

International Boat Show, Earls Court, January 4 – 14, 1961.

British Nylon Fair, Royal Albert Hall, February 6 – 10, 1961.

International Hardware Trades Fair, Olympia, February 6 – 10, 1961.

International Carpet, Linoleum and Floor Coverings Fair, Earls Court, February 27 – March 3, 1961.

Carpet Production Exhibition, Earls Court, February 27 – March 3, 1961.

Household Textiles and Soft Furnishings Fair, Earls Court, February 27 – March 3, 1961.

... and abroad

International Trade Fair, Lyons, March 4 – March 12, 1961, (apply Robert Brandas & Partners Ltd, 47

continued on page 87



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Albemarle Street, London W1).

International Spring Fair, Frankfurt, March 5 - 9, 1961 (Lep Transport Ltd, Sunlight Wharf, Upper Thames Street, London EC4).

British Columbia International Trade Fair, Vancouver, May 3 - 13 (Agent General, British Columbia House, 1-3 Regent Street, London SW1).

United States World Trade Fair, New York, May 3 - 13 (Trade Fairs and Promotions Ltd, Drury House, Russell Street, London WC2).

British Trade Fair, Sokolniki Park, Moscow, May 19 - June 4, 1961 (Industrial and Trade Fairs Ltd, Drury House, Russell Street, London WC2).

COMPETITIONS

Milking parlour

The Country Landowners' Association has launched a competition for the design of a parlour milking system. The entry submitted must be in England or Wales, constructed or substantially modified since May 1945, and in use by the end of this year. According to the CLA, the word 'system' does not apply to the arrangement of stalls, etc, but "covers the milking parlour and dairy, arrangements for the collection and dispersal of cows, and for the disposal of milk and muck."

The association is offering a first prize of £150, a second prize of £75, a third prize of £50, with a £25 prize for the best entry submitted by a member of the association. The panel of judges includes P. Dunham - an architect specialising in farm buildings, Nigel Elgar - a land agent, and Ted Owens - a dairy farmer. Judging will be based on such features as general practicability, layout, value for money, efficiency and appearance. Entries may be made by the designer, owner, or occupier of the buildings concerned. Full particulars and entry forms are available from the Country Landowners' Association, 24 St James's Street, London SW1. The last date for receipt of entries is December 30.

Car competitions

The Institute of British Carriage and Automobile Manufacturers has announced details of its automobile body design and motor vehicle body crafts competitions for 1960/61.

These competitions take the place of the annual drawing and handicrafts competitions which IBCAM has organised in previous years. This year the competitions cover the design of private cars; next year they will relate to commercial and public service vehicles. Full details are available from the Institute of British Carriage and Automobile Manufacturers, 50 Pall Mall, London SW1. The last date for receipt of entries is August 31, 1961.

Furniture for the office

The Council of the Timber Development Association has announced details of its second competition for the design and manufacture of wooden office furniture. This will follow the pattern of last year's competition (design 130/59), in that it will be held in two stages, and designers will be asked to work in collaboration with manufacturers. In the first place designers should submit detailed drawings; competitors whose work the assessors feel worthy of further development will then be asked to proceed



On the deck

Two new packs of playing cards: LEFT, a 'prestige' set designed for the Orient Line, by Margaret Calvert, with



Jock Kinneir, and RIGHT, a new design by Siriol Clarry, recently introduced by John Waddington Ltd. Price 7s 3d.

to the second stage, collaborating with a manufacturer to produce full-sized prototypes.

This year the design categories cover desks and chairs for clerks and managers, and a storage unit. The assessors include Professor Robert H. Matthew of the Department of Architecture, University of Edinburgh, Professor R. D. Russell, School of Furniture Design at the Royal College of Art, and S. N. Abbott and Michael Carson of the Office Appliance and Business Equipment Trades Association. Further details are available from the Secretary, the Timber Development Association, 21 College Hill, EC4. (Applicants are requested to write in immediately.)

Label of the year

The Society of Labologists has announced details of its 1960/1 Label of the Year contest. Firms are asked to submit labels that have been brought into use since June 1959, or which are intended to be in use by June 1961. The last date for receipt of entries is December 31; further details are available from the Secretary, The Labologists' Society, 211 Piccadilly, London W1.

MISCELLANEOUS

Reasons for railway accidents

At the request of the British Transport Commission, the Medical Research Council is undertaking an independent investigation of the human factors involved in railway accidents. A committee, under the chairmanship of Professor G. Drew, has been set up to initiate research into this problem.

Information about the occasions on which drivers pass adverse signals is being collected; 'normal' train journeys will also be studied, so that a statistical comparison between those occasions on which signals are correctly observed, and those on which they are misread, can be made. By this means some of the factors which may have a bearing on the misreading of signals may be identified and investigated.

In addition to this collection of statistical information, observations are being made on the footplate to gain familiarity with the task of the engine driver

and the conditions under which work is carried out.

A number of laboratory investigations to determine the suitability of tests of memory and alertness are also in progress, and it is possible that these may be used in the field at a later date.

Annual report

A year's achievement that included 688,000 visitors to The Design Centre, the award to the CoID of the *Gran Premio Internazionale La Rinascente Compasso d'Oro*, and a number of specially arranged exhibitions at home and abroad are recorded in the CoID's *Fifteenth Annual Report*, for 1959-60. The report, which is now on sale, can be obtained from any branch of HM Stationery Office, through booksellers or from the CoID, The Design Centre, 28 Haymarket, SW1 (Scottish Design Centre, 46 West George Street, Glasgow C2), price 2s 6d (by post 3s).

Post-graduate designers' course

A School of Advanced Studies for post-graduate design research has been opened at the Manchester Regional College of Art. Admission will be exclusively by fellowship scholarships donated by various industrial concerns.

The course (of one or two years) will involve periods of travel and work at various leading European colleges (later it is hoped that this will be extended to the USA).

The head of the new school will be John Holden who is principal of the Manchester Regional College of Art; the work will be under the direction of Ray Howarth, head of the School of Graphic Design at the college.

Retail training

The CoID's Retail Section has announced details of the residential courses which it is organising in 1961 as part of its retail training programme. These include:

Furniture (for junior salesmen), March 6-10, Westham House, Barford, Warwick.

Furniture (for senior staff), April 10-14, Pershore

continued on page 89

HOW TO GET YOUR MONEY'S- WORTH WHEN YOU BUY FLUORESCENT FITTINGS

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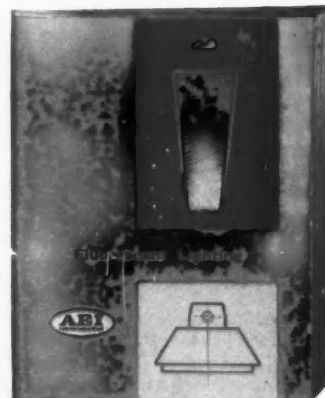
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*** See fitting selected by CoID. at Design Centre**

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SERIES 2 -THE BEST BUY ON THE MARKET

Institute of Horticulture, Pershore, Worcester.

Pottery, April 24-28, Wedgwood Memorial College, Barlaston, Stoke on Trent.

Glass, September 18-22, Fircroft College, Selly Oak, Birmingham.

Furnishing Fabrics, October 9-13, Derbyshire Conference House, Buxton.

Further details are available from Miss Jean Stewart, Retail Section, CoID, 28 Haymarket, sw1.

Ergonomics primer

The department of management and production engineering at the Brunel College of Technology is organising a two weeks' course on ergonomics. The course, an *Introduction to Ergonomics*, is aimed at heads of work study departments. It will be held at the college from November 14-25, and the fee is 25 gns. Further details are available from Robert Borger, Department of Management and Production Engineering, Brunel College of Technology, Acton, w3.

LETTERS

Art school training

Sir: I am sorry to have given any offence by the leader which you kindly invited me to contribute (DESIGN 139/19), or that anyone should suppose that I was unfairly taking advantage of your editorial columns (DESIGN 142/85).

The astonishing revolution, to which I alluded, that has taken place since the war with regard to the training of students by colleges of art in all branches of industrial design, has been primarily due to Government action culminating in the establishment of the CoID and the re-establishment of the Royal College of Art on a proper footing. Without the proselytizing work of the former no such achievement would have been possible; and I think most principals would readily acknowledge that the standards of equipment, accommodation and salary scales which the Ministry of Education set for the latter when it was reorganized 12 years ago have not been unhelpful to themselves and to their local education authorities in developing their own plans. The successful reorientation of the Royal College of Art, as evidenced by the employment in all fields of industry of its former students, is wholly due to the calibre of staff which good salaries and adequate facilities for their own work and that of their pupils, have enabled it to attract.

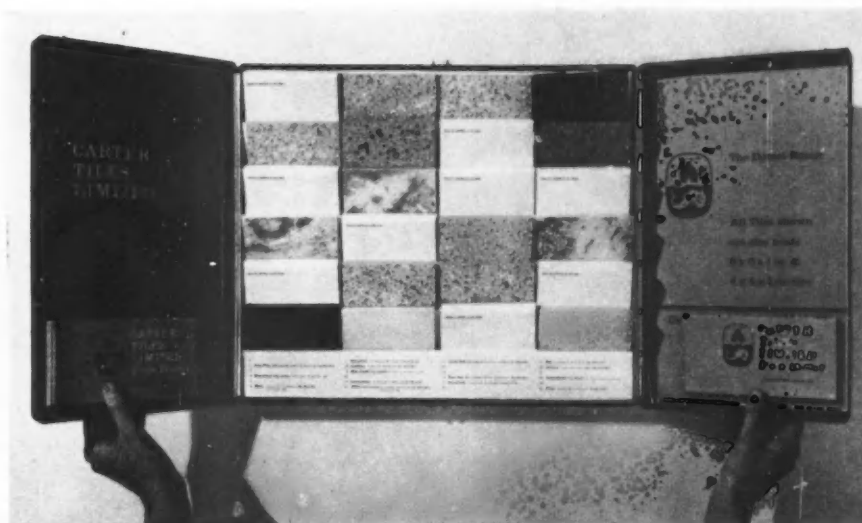
However, as I suggested in your July issue, there remains a great deal more for all of us working in this field to do.

ROBIN DARWIN
Principal
Royal College of Art
London sw7

Dental research and design methods

Sir: Although I thought the idea of an article on mouth cleaning devices was fundamentally good (DESIGN 139/24-33), there are some criticisms which I should like to make.

The first of these is the inclusion of a number of



Tiles ranged

Carter Tiles Ltd has introduced this box to show its Dorset range of tiles. Tiles and box were designed by Ivor Kamlish.

unsupported statements which are not generally acceptable to research workers in this field. For instance, it is generally agreed that the stagnation of foods around the teeth is related to caries, but to state categorically that "the bacterial-fermentation of carbohydrates forms lactic, malic, and succinic acids, which in turn attack the teeth, penetrating the hard enamel and permitting bacteria to spread rapidly through the soft interior" is quite unjustifiable at present. While most workers will accept the theory that the attack in caries is caused by lactic acid or some similar acid, there is at present remarkably little proof that any one of these is the agent causing the damage.

Again a reference is made to the "germ-free trench between the gum edge and the side of the tooth". I appreciate the need to use terminology understandable to laymen, but the term 'trench' implies an open space in which food can stagnate, and in the normal mouth there is certainly no space between the gingivae and tooth.

If one accepts the fact that the theory of the causation of caries and periodontal disease as stated in the article is over simplified, then I must comment on the design method, particularly as outlined in the summary on page 31. As I said before, the idea is good. The real problem lies in the fact that items 8, 9, 10, 11 and 12 in the *Design Method* section form the main aims of dental research at the present time. The fact remains that we do not know sufficient about the mechanism and the causation of dental caries to be able to give satisfactory answers to most of the questions which you pose. It is, therefore, most unlikely that the answers would be forthcoming in an investigation of this kind, and as it is stated that the design of the toothbrush or mouth cleaning device depends on this evidence, then presumably the aim cannot be achieved.

I should have felt much happier if the investigation had started from the simple statement that

caries is related to bad oral hygiene. Periodontal disease is frequently related to the same factor and also to the lack of stimulation of the gingivae. It is, therefore, necessary to find some satisfactory method of cleaning the mouth properly, for toothbrushes, as we all know, do not do this job very well. If this were the simple statement and aim I should applaud it and should be very interested indeed to see the results. As it stands no results are offered and I can only comment that the article is 90 per cent a synopsis, though rather a bad one, of the present aims of dental research, with a pious hope that someone will be forthcoming with time and money enough to spend in designing a more satisfactory method of oral hygiene.

In so far as the article disseminates the need for more research in dentistry then I am delighted and I congratulate you.

A. I. DARLING
University of Bristol
Dental School
Lower Maudlin Street
Bristol 1

The toothbrush and the test of time

Sir: Had the authors of the article *Mouth Cleaning Devices* (DESIGN 139/24-33) sought the opinion of those intimately associated with oral hygiene they would no doubt have found that few would have dismissed the present day toothbrush as sweepingly as they did. A few days after the article appeared the British Dental Association held its conference in Edinburgh, and Dr J. N. Mansbridge, senior lecturer in preventive dentistry at the University of Edinburgh said, in a paper on oral hygiene: "Dental caries experience is substantially less in those whose standard of oral hygiene was classed as good compared with those who were classed as neglected", and "It is clear that standards of oral hygiene and

continued on page 91



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frequency of toothbrushing are closely related", and "The results of the present study show that standards of oral hygiene in children are significantly associated with their dental caries experience".

The members of your own team seem of two minds. First they say (page 26): "The soft brush, even though its bristles are not much better at penetrating small crevices, is capable of providing all the valuable gum stimulation which will win half the battle in oral hygiene". Then on page 29: "We have seen that in common usage the toothbrush is not a very effective instrument for inhibiting the fermentation of food acids, or for stimulating the blood circulation in the periodontal tissues".

With their description of proposals for new toothbrushes and substitutes as "revolutionary in concept", your writers certainly confirm the saying that "there is nothing new under the sun". Their suggestions must have been highly amusing to toothbrush manufacturers, for it is no exaggeration to say that trick toothbrush inventions are innumerable, and manufacturers have all seen mock-ups and prototypes similar to those you illustrated on page 32. As for the mouthspray, the only novelty seems to be that it is meant to be portable.

Toothbrushes have stood the test of experience and the proposals put forward will never replace the toothbrush with the wide variety of designs manufactured for the widely differing needs of users.

R. F. KNOX
Secretary
The British Brush
Manufacturers Association
80 Coleman Street
London EC2

Criteria for good design

Sir: I hope that L. Bruce Archer realises that in his amusing *What is Good Design?* articles (DESIGN 137/28-33, and 140/26-31) he is laying down completely arbitrary criteria, whether he arrived at them by analysis or any other way.

Any design might contravene any one (or indeed all) of his questions and still be considered a good design; contrarily, it might satisfy them all and still

be considered a bad design.

The idea that 'good' is a concept that can be defined by analysis died, quite officially, in 1903.

JOHN ARCHER
98 Larkshall Road
Chingford
London E4

Safety belts

Sir: We were most interested by the article on car safety belts, *Secured Safely?* (DESIGN 140/46-9), and congratulate you on the study and careful thought which must have gone into its preparation. There are, however, two points we must raise:

1 The article implies that the current Volvo belt was designed by the Swedish State Power Board as an improvement on the single diagonal belt. This is not at all the case and the single diagonal belt remains the design recommended by the Swedish State Power Board.

When Volvo wished to fit safety belts as standard equipment, the firm developed its own design of belt and buckle, and it is only since this time that safety belts have been fitted as standard equipment on Volvos. The Power Board design was developed for fitting into normal cars, and the reinforcements provided by us are quite satisfactory. It has also been approved by the Swedish Ministry of Transport and satisfies all the requirements of its excellent and very comprehensive standard.

2 Malcolm Brookes refers in the article to the dangers of whiplash action, and implies that the addition of a lap strap to the diagonal belt would prevent this.

Whiplash occurs where the material used in constructing the safety belt has a high degree of elasticity and therefore no residual elongation. Britax (London) Ltd has continually pointed out that Terylene has the valuable property of a slow rate of recovery, and for this reason avoids the possibility of whiplash occurring. All belts manufactured by Britax and its overseas associates use a webbing made of polyester fibre.

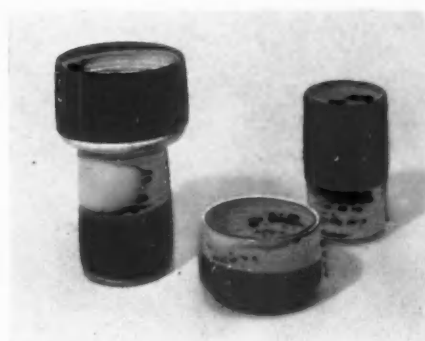
We would add that the principal danger of whiplash is that a person's neck can easily be broken if, after a high impact, he is hurled back into his seat. The use of a lap strap will not, therefore, in any way, reduce the dangers of whiplash.

S. K. PROCTOR
Director
Britax (London) Ltd
Proctor Works
Byfleet
Surrey

Index in the provinces

Sir: 'Design Index', the classified index of approved goods at The Design Centre provides an excellent service for those who know about it and can make the effort or spare the time to visit the Centre. But alas, even those living within 10 or 15 miles of the Haymarket go out and buy the wrong things simply because they do not know what good things are to be had. So what about people living say in Norwich or Sheffield or Aberdeen?

Is there not therefore a need for a 'Design Catalogue' based on the 'Index', giving photographs, makers' names, prices, availability of colours, finishes,



Devonshire pots

Three stoneware vases designed by Marianne de Tray; they were on display at an exhibition organised recently in Totnes by the Devon Guild of Craftsmen

etc, and divided into volumes according to the categories of goods? We cannot have a Design Centre in every town, but the catalogue could be sent out to retailers, public libraries and others interested all over Britain.

M. S. WASON
Highfield Lodge
Church Hill
Totland Bay
Isle of Wight

Editor's note: The cost of maintaining an up-to-date 'Design Catalogue' in the main regional cities would be great, and it cannot be achieved on the grant at present available to the CoID. (A start on duplicating 'Design Index' has however been made in Glasgow, in the CoID Scottish Committee's Design Centre.)

The CoID is, however, extending its activities outside London by arranging special displays of products chosen from 'Design Index' in leading retail stores. Again, independent design exhibitions such as those at Bristol and Nottingham help to create a wider public for good modern design. They show goods chosen from 'Design Index', and at a later date Bristol intends to show duplicates of the photographic records in the Index.

BOOKS

Why people buy

Louis Cheskin, *Business Publications Ltd*, in association with B. T. Batsford Ltd, £1 15s.

This is a fascinating and disconcerting book for those who are not familiar with the techniques of motivation research, first widely publicised by Vance Packard in *The Hidden Persuaders*. In *Why People Buy*, Louis Cheskin describes his own methods of scientific testing by which he claims to predict accurately the selling power of a product. His tests based on 15 years' experience in motivation research differ in some respects from Mr Packard's and he considers them more accurate.

Even with an outstanding product and a huge advertising campaign a manufacturer cannot be

continued on page 93

Lecture theatre

Part of the new lecture theatre for the National Engineering Laboratory in East Kilbride, Lanarkshire. The chairs are from Ernest Race Ltd's standard range of auditorium seating; the layout and décor is by the Ministry of Works architects' department in Glasgow.



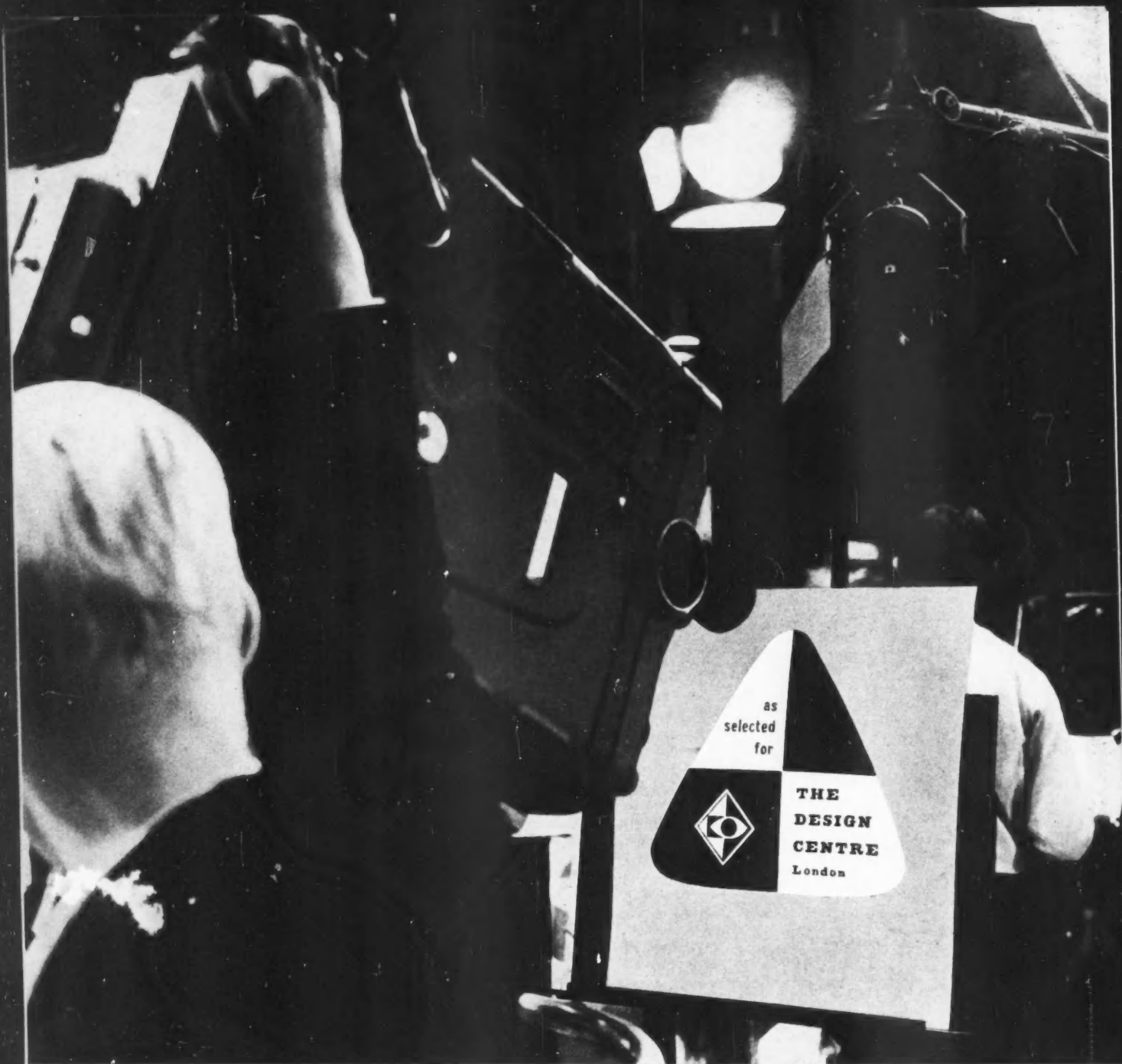


Photo: John Garner

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The Design Centre, Haymarket, London SW1

sure of good sales, he says, unless the pack, advertising and price stand up to consumer tests at conscious and subconscious levels. It is not enough for a designer to produce a beautiful pack – it must pass tests for readability, visibility, eye-movements, association and preference by potential consumers. Market research consisting of direct interviews will not give valid results since people often do not know, or will not admit, why they buy a product – tests must be made on an unconscious level to reveal true attitudes. Good advertising should not aim at strong impact and quick recall – the greatest effect of advertisements is on our unconscious mind which must be gently persuaded to buy the product.

Mr Cheskin's methods seem well supported by detailed examples of his tests and product case-histories. On the other hand, the book suffers from lack of illustrations and too much repetition – and he is writing only of the American market. But there is much to be learnt from it by those who are open-minded and concerned with better sales.

DOROTHY MEADE

Wohnen heute 3

Editor Alfred Altherr, Arthur Niggli Ltd, Switzerland, Alec Tiranti Ltd, 16s 6d

This book is the Swiss equivalent of the *Decorative Art* annual, but whereas the latter is international, *Wohnen heute 3* is restricted to Switzerland, and is a catalogue of goods selected by the Schweizerischer Werkbund, the Swiss equivalent of the CoID.

It is remarkable that although limited to that small country, the contents in no way show a falling off of the standards set by the many countries represented in the British publication. This is obviously due to the Swiss passion for cleanliness, that comprises clean design in all its aspects, and applies not only to architecture, in which the Swiss have been outstanding for decades, but also to furniture, textiles, light fittings, household and office appliances.

The Swiss have long been known as creators of sound and lasting designs, eschewing merely modish superficialities and following conscientiously Sir Henry Wotton's celebrated principles of good building: "Commoditie, firmeness and delight" – in that order. The "commoditie" is the result of the extra thought that goes into the design of all articles of daily use; the "firmeness" is inherent in the traditional quality of Swiss craftsmanship; the "delight", decisively relegated to third place, is not always obvious at first sight in the severe simplicity of most articles shown in the book under review, but they are extremely 'liveable'.

The "delight" is particularly notable in the household china and glassware. In the former, Heinz Loeffelhardt has been particularly successful in the various dinner and coffee sets he has created for the Arzberg, ABOVE, and Schönwald porcelain manufacturers, which could hardly be simpler or more pleasant in shape. Equally pleasing and graceful are his sets of glassware by A. F. Gangkofner. On the other hand, the largely square and straight-lined furniture included in the book may perhaps be deemed somewhat harsh and uncompromising by present-day standards.

As a whole, however, this very well produced book



Tableware designed in 1957 by Heinz Loeffelhardt for the Porzellanfabrik Arzberg (see *Wohnen heute 3*)

(whose letterpress, incidentally, is in German, French and English) is an encouraging sign that the modern idiom in design is not the creation of long-haired aesthetes, but represents a thoroughly practical and businesslike approach by thoroughly practical and businesslike men.

RENÉ ELVIN

Interior design

Henry and Lilian Stephenson, Studio Books, £1 15s

This is a good book. In less than a hundred pages it describes the basic considerations and criteria necessary in designing a domestic interior. It is essentially a concentrated introduction to a wide subject, and it has all the advantages and drawbacks of quick, strong imbibing.

Short, to-the-point chapters deal with design approach, planning, materials, colour, furniture, method of presentation and related details. The text is convincing, rarely speculative, and wholly didactic in tone. Incredibly informative on many detailed elements such as flooring, fabrics, paints, etc, it is accompanied by relevant and understandable illustrations and drawings.

The fault of this book is the creditable one of attempting too much in too small a space. Those who come new to the subject will feel that here it all is at their fingertips, with such advice as . . . "indicate the dangers of clients wanting to change details" – "walls should be studied with the idea that they are backcloths to general furnishing" – "never use Portland cement with gypsum" – "light colours reflect light", etc.

The best chapter, on *Planning the Interior*, takes the reader step by step through the design of a modern flat. Dozens of ideas are thrown out for him to catch in the process, and the whole business is made to sound an exciting, stimulating vocation.

And of course it is. And it all sounds so easy. One has visions of lots of bright, polite young people applying for jobs during the next 10 years, and to the question "And where did you train?", answering "I was never at a school or in a studio – but I have read Henry and Lilian Stephenson's book".

GEOFFREY SALMON

Books received

An Essay on Typography (new fourth edition), Eric Gill, J. M. Dent & Sons Ltd, 12s 6d

Autolithography, Henry H. Trivick, Faber & Faber, 21s

Your Book of Furniture, Molly Harrison, Faber & Faber, 8s 6d

Technical Illustrating, A. Edward Harvey, B. T. Batsford Ltd, 21s

The Biting Eye, André François, Perpetua Ltd, £2 2s

This month's cover

This month's cover is based on two designs by Kosset Carpets Ltd (see page 55).

Addenda

DESIGN 141/81: the credit titles for the play *Nest of Four* were designed by Robin Hughes.

DESIGN 141/83: Ashley Havinden has been director of design at W. S. Crawford Ltd since 1929.

DESIGNERS in this issue

Professor Misha Black, OBE, RDI, PFPIA, MIDSTRA; Ian Burke; Margaret Calvert; Siriol Clarry; Lucienne Day, ARCA, FPIA; Marianne de Tray; C. G. Farmer; Abram Games, OBE, RDI, FPIA; Robert J. Gilson; Stanley Godsell; Ronald Grierson, FPIA; David Harris, MSA; G. R. Hesketh; Ray Howarth; Ivor Kamlah, MSA; Peter Keevil; John Kingsley Cook; Jock Kinneir, FPIA; Margaret Leischner, FPIA; Audrey Levy, DESICA, MSA; John Lunn, FPIA; Peter McGowan; Robert McLean, FPIA; James Main; Eric Marshall, FPIA; Hugh Martin; J. H. Mellor, MSA; P. F. Ralph; Professor R. D. Russell, RDI, FPIA; K. G. Sadler; Douglas Scott, FPIA; David Wheeler; John Wickham.

MANUFACTURERS in this issue

Broadloom Carpets Ltd, Wheatfield Mill, Rishton, nr Blackburn, Lancs
Carpet Trades Ltd, PO Box 5, Mill St, Kidderminster
Carter Tiles Ltd, East Quay Rd, Poole, Dorset
Charles Colston Ltd, 7/11 Lexington St, w1
Commer Cars Ltd, Biscot Rd, Luton, Beds
John Crossley & Sons Ltd, Dean Clough Mills, Halifax
Emerson Electronics Ltd, Brent Crescent, North Circular Rd, NW10
Ferguson Radio Corporation Ltd, Gt Cambridge Rd, Enfield
T. F. Firth & Sons Ltd, Brighthouse, Yorks
General Electric Co Ltd, Magnet House, Kingsway, WC2
William C. Gray & Sons Ltd, Newton Carpet Works, McCalls Avenue, Ayr, Scotland
Jute Industries Ltd, Meadow Place Buildings, Dundee, Scotland
Kosset Carpets Ltd, 6-10 Bruton St, w1
Hugh Mackay & Co Ltd, PO Box 1, Walkergate, Durham City
McMichael Radio Ltd, Langley Park, Slough
Micro Methods Ltd, East Ardsley, Wakefield, Yorks
Alfred Morris Furnishings Ltd, 60 Berners St, w1
Orient Steam Navigation Co Ltd, 14 Fenchurch Avenue, EC3
Quayle & Tranter Ltd, PO Box 1, Kidderminster, Worcs
Ernest Race Ltd, 22 Union Rd, SW4
Regentone Radio & Television Ltd, Eastern Avenue West, Romford, Essex
Rivington Carpets Ltd, Tumbling Bay Wharf, Sunbury Lane, Walton-on-Thames, Surrey
Somic Ltd, PO Box 8, Alliance Works, Preston, Lancs
A. F. Stoddard & Co Ltd, 197 Aldersgate St, EC1
Frank Stone (Kidderminster) Ltd, Kidderminster, Worcs
James Templeton & Co Ltd, Templeton St, Glasgow, Scotland
Tintawn Ltd, 658 Ajax Avenue, Slough, Bucks
Ultra Electric Ltd, Western Avenue, Acton, W3
John Waddington Ltd, Morris House, Berkeley Square, w1
Washington Group of Hotels, 16 Half Moon St, w1
Waveney Apple Growers Ltd, Aldeby, Beccles, Suffolk
Wilton Royal Carpet Factory Ltd, Wilton, nr Salisbury



The Chairman likes the new pack

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The Glass Manufacturer too



...BUT WILL Mrs. JONES LIKE IT?

The Glass Container-Acceptance Testing service will make sure

At last! The new pack is agreed. Around the table heads nod expert approval . . . but Mrs. Jones (average housewife) does not nod her head — she is not at the meeting. A pity! Because Mrs. Jones, A.H., is the ultimate, infallible authority on pack design. If she gives it the nod, it's right — if she doesn't, it's wrong.

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under these headings will be in the supply of goods, containers and such items as labels and transport. In the case of Area Test Marketing schemes however, a nominal charge will be made for planning the operation.

Security. Where any of these tests are carried out on new products, the whole operation can be executed with absolute security. Packers can have complete anonymity by employing one of the several brand names that have been registered especially for this purpose.

If you would care to have further details of this service, please do not hesitate to ask, irrespective of whether your interest is immediate or not. Details of this scheme have been published as a booklet, copies of which are available on request from your Glass Manufacturer or from the Federation.



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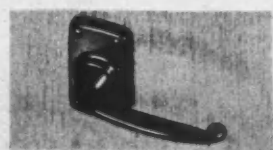
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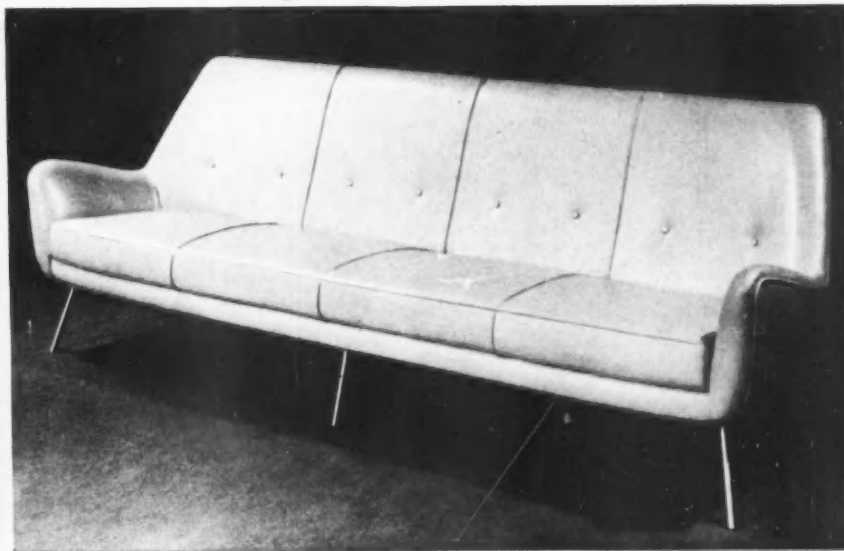
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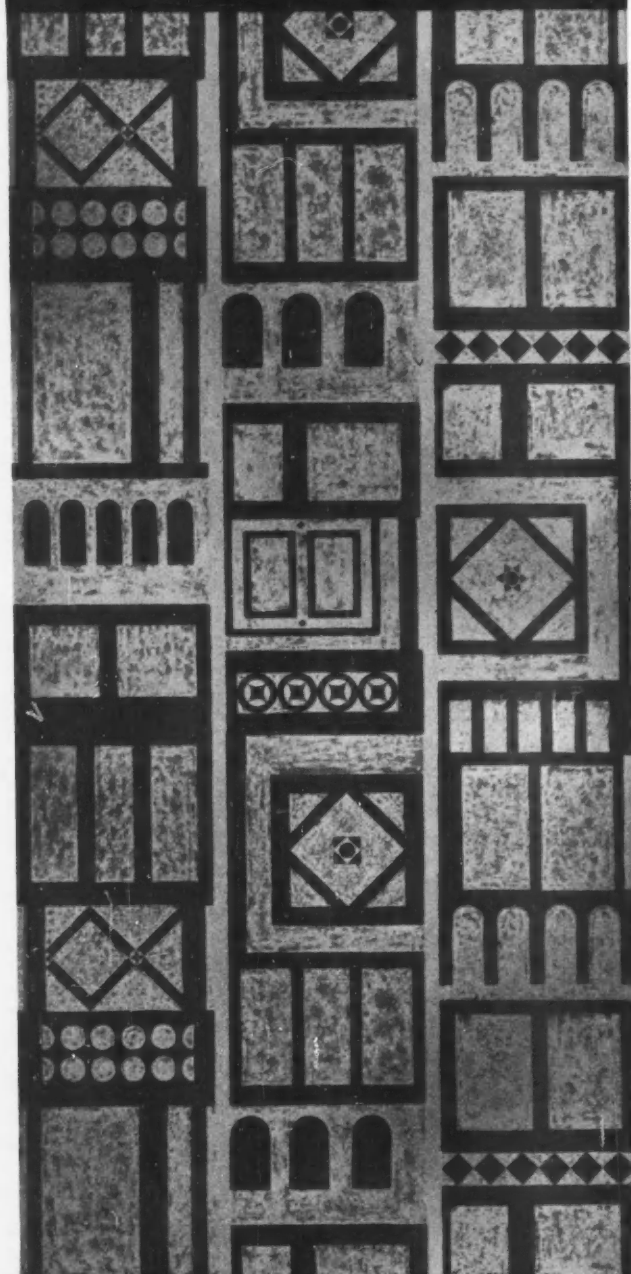
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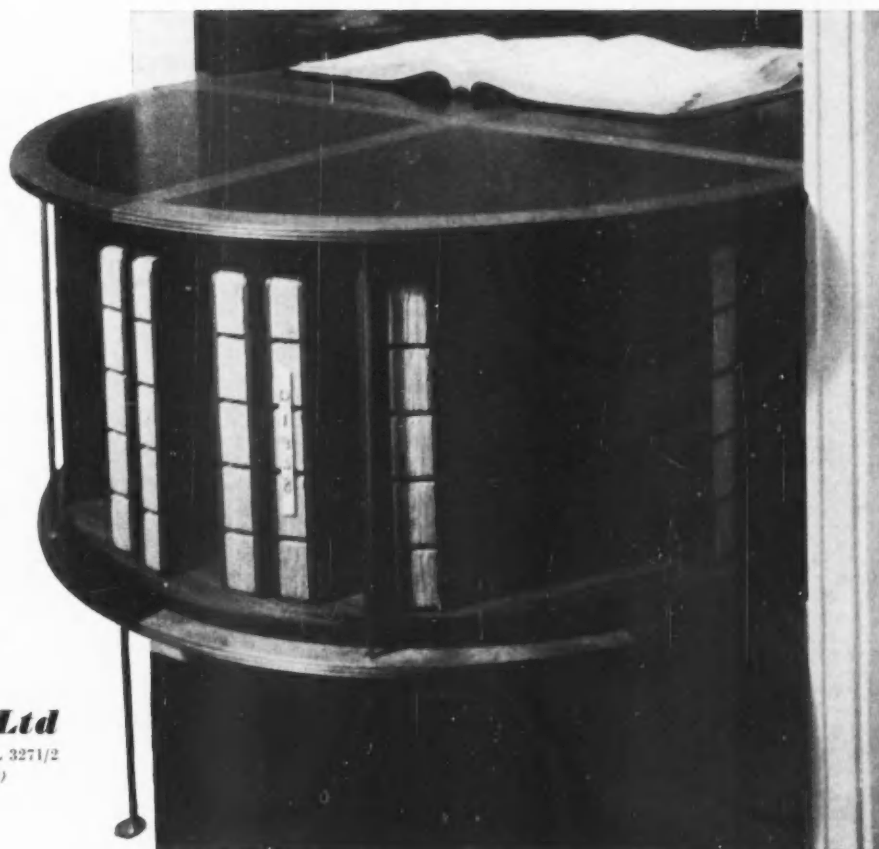
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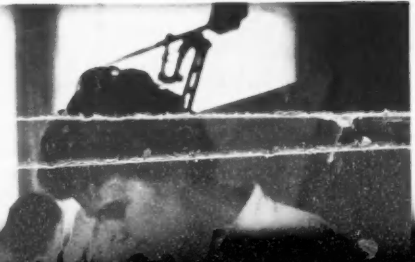

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DESIGN 143



tomorrow's design

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Bidet

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Classified advertisements

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Situations vacant

COUNCIL OF INDUSTRIAL DESIGN

The CoID requires an Industrial Liaison Officer (man) for domestic and other consumer products manufactured by the engineering industries. The essential qualifications are a good general education, a full time training in industrial design and experience in the design of consumer goods with an engineering basis. Age 28 - 45. Starting salary according to qualifications and experience in the scale £1,045 - £1,295 or £1,295 - £1,630. The salary scales are under review. There are 4½ weeks' holiday and pension scheme. Further particulars and an application form are obtainable from The Recruitment Officer, CoID, 28 Haymarket, London sw1.

Dundee College of Art

SCHOOL OF DESIGN

Principal: H. Adam Crawford, RSA, DA (Glas)

The Governors of the Dundee Institute of Art and Technology invite applications for the position of Head of the School of Design. The College conducts a four years' Diploma Course in Design which is recognised by the Scottish Education Department. The Head is expected to organise classes throughout the School and undertake some studio instruction. A knowledge of Cabinetmaking and general Industrial Design would be an advantage. Salary scale

- £1,860 rising by annual increments of £60 to £2,100 per annum. Applications on the prescribed form should be sent, not later than two weeks from the appearance of this advertisement, and should be addressed to the Principal, College of Art, Belmont, Perth Road, Dundee. Application forms, with full particulars, may be obtained from that address.

Herefordshire Education Committee

COLLEGE OF ART AND CRAFTS

Principal: Kenneth Craddock, DA, MSIA, FRSA

Applications are invited for the post of Teacher of Window Display. Candidates should be suitably qualified and, preferably, possess a knowledge of and ability to teach other art and craft subjects if required. Salary: Grade 'A' Burnham Technical Scale. Application forms may be obtained from M. I. Edge, BA, Director of Education, County Offices, Bath Street, Hereford.

FURNITURE DESIGNER required by Harris Lebus Ltd to join their team of Cabinet Designers at their Tottenham factory. Applicants, who should be qualified and have had previous industrial experience, are invited to provide details of training, experience and background to the Personnel Manager, Harris Lebus Ltd, Finsbury Works, Tottenham, n17. The Company operates a Staff Superannuation and Life Assurance Scheme.

PUBLISHER of children's books requires young house typographer. Editorial and art experience or interest an advantage. Write in confidence to H. E. Wharmby, Brockhampton Press, Market Place, Leicester.

MALE DESIGNER required age about 25-30 for Group Head Position dealing mainly with the export market. Work covers all aspects of the furniture and interior field. Write: Design Group Manager, Catesbys Design Group, Tottenham Court Road, w1. MUS 7777.

PACKAGING DESIGN ARTIST required for creative work on sales development. Young artist with interest in this direction considered. Send full details to: Sales Director, Pearlite Box Company Ltd, West Road, Tottenham, n17.

TYPOGRAPHER and visualiser required by educational publishers and printers. 5-day week and pension scheme. Offices in SW London. Applicants should state age, experience and salary required. Interviews at any time including evenings. Box No. 466, Design, 28 Haymarket, London sw1.

TEXTILE or Wallpaper Designer wanted. Frank Designs, 48 Neeld Crescent, nw4.

DESIGNER. A new and interesting position of exceptional opportunity in the field of design is being

classified advertisements continued on page 104

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CLASSIFIED

advertisements continued from page 103

considered by a leading Furnishing Fabric Manufacturer of printed and dyed materials. The man who will probably fill such a position will possess an aptitude for design and its commercial potentialities, a broad commercial outlook which relates economic production to a progressive sales policy, be prepared to set up from scratch a design studio and eventually be capable of meeting the Company's customers at a high level. Personal designing ability is not as essential as the factors mentioned above since designs are purchased throughout the world. The first years will be spent at the Company's Works near Manchester, but eventually the base of operation may be either in London or Manchester. Initially remuneration will be modest but will increase in accordance with the man's progress to high executive status. Write in the first instance, giving full details to the Sales Director, under Box No 468, Design, 28 Haymarket, London sw1.

MINISTRY OF WORKS, Supplies Division, London require an Assistant Design Officer for a wide variety of work including high quality domestic and office furniture and equipment. Ability to produce integrated schemes and to prepare coloured perspective sketches for furniture and interiors is essential. Applicants must hold National Design Diploma, ARCA, MSIA, or equivalent. Previous experience an advantage but not essential. Salary range £1,115 - £1,375 p.a. Successful applicant will be engaged for a period of from three to five years. Applications stating age and experience to Controller of Supplies, Ministry of Works, Southbridge House, Southwark Bridge Road, London SE1.

BASIL SPENCE & PARTNERS require assistants to develop designs for furniture and furnishings. Salary will be in accordance with age and experience. Write giving details to - Basil Spence & Partners, 48 Queen Anne Street, w1.

Commissions and contracts wanted

Furniture designer, DES.RCA, MSIA seeks commissions. Box No 467, Design, 28 Haymarket, London, sw1.

PACKAGING, PRINT, DISPLAY. Harold and Mary Brend, Design Consultants, offer their personal services to manufacturers in London, Midlands, E. Anglia. Ring Harold Brend, MSIA, Letchworth 1237.

Prototypes and model making

FOR EXHIBITION STANDS and animated light displays, architectural and visual planning models, prototype design and development - consult: John Evans and Associates, East Gate House, Cheney Walk, Northampton.

RICHARD DENDY & ASSOCIATES welcome your enquiries for architectural, engineering, experimental and ship models; production runs of advertising units in rubber, plastics, wood or metal; prototypes in all materials; giant exhibition and carnival displays. 4, 5 and 6 Seaton Place, Hampstead Road, London NW1. EUSTON 7617 and 1981.

METAL-WIRE-TUBULAR WORK. Let us manufacture your prototypes and/or production runs. Holborn Metal Works. CAN 8042.

Miscellaneous

AEROFOAM can supply made-to-measure Dunlopillo latex foam seat panels covered in any material to fit on your frames - or loose cushions covered or uncovered - or just the Dunlopillo - or even just the advice - or bench seating anywhere. Aerofoam Ltd, 19-27 Cricklewood Bdy, NW2. GLA 9844.

PICTURE FRAMES of all types made. The largest stock in London. Rowley, 86-87 Camden Street, Kensington. Telephone PARK 4349.

Printing and publications

LITHOGRAPHY - If you are having difficulty in getting your colour printing to time contact Townsends,

Printers, Exeter, or phone London Office, Pinner 7927.

Shipping and packing

INTENDING EXHIBITORS at European Fairs should contact Davies Turner & Co Ltd, 4 Lower Belgrave Street, London sw1, SLOANE 3455, for details of DIRECT ROAD SERVICE.

Design development

AN IDEA is one thing - developing it to the production stage is quite another! Our experience in all production techniques in metals and plastics, supported by our design and prototype facilities, enables us to offer a first class service in this field. R. J. Emery and Company, Studio Two, Brownfields, Welwyn Garden City, Herts. Tel Welwyn Garden 6500 and 4720.

Record of Designers

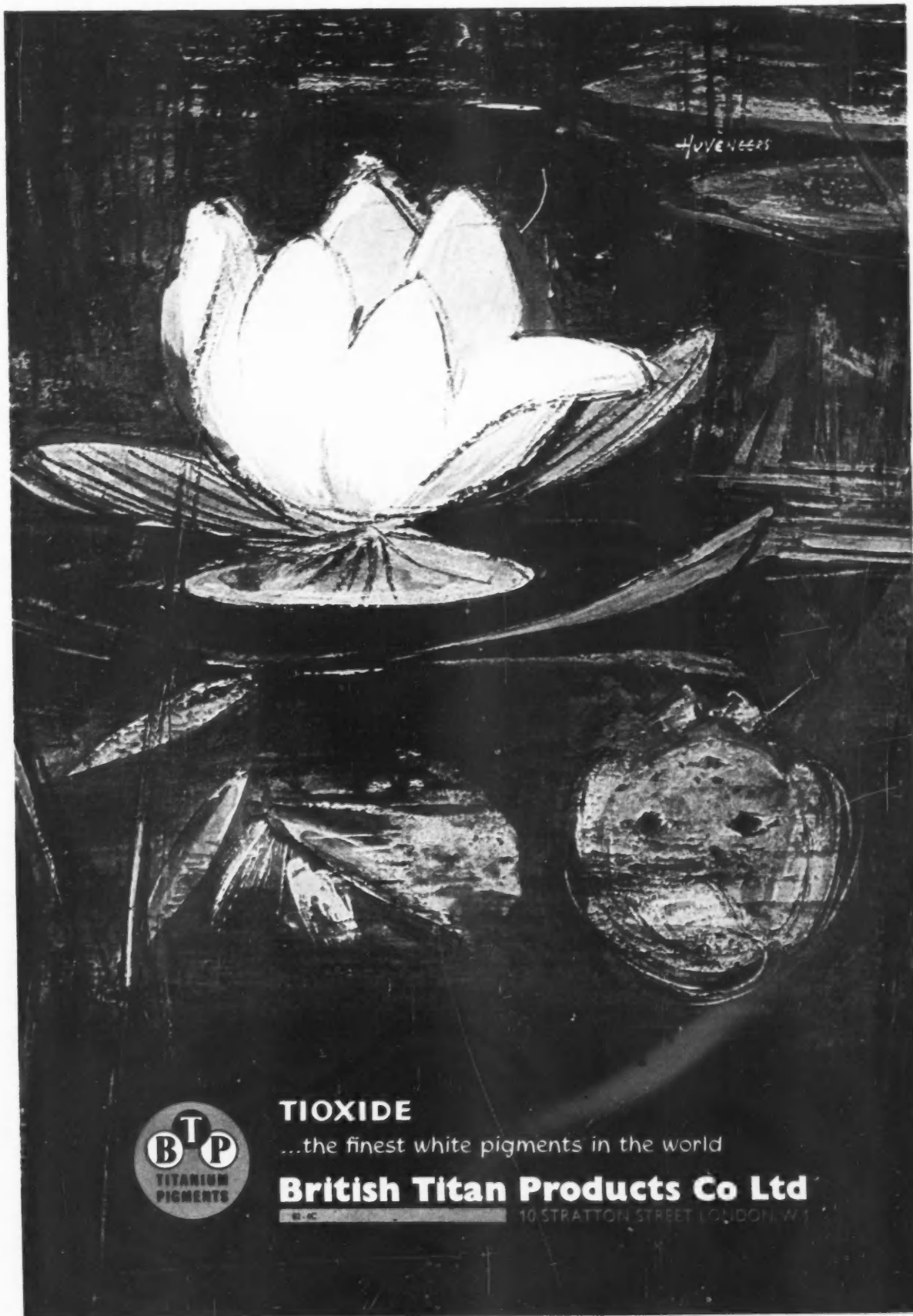


Two designs from a range of printed textiles produced for Arthur Sanderson & Sons Ltd Centenary collection this year. The designers were selected in collaboration with the CoID from the files of the Record of Designers. LEFT *September Garland* by Doreen Dyall. RIGHT *Pavana* by Cliff Holden.



Manufacturers and others wanting design consultants or staff designers can apply for a short list (requirements must be stated in some detail) to the Record of Designers, CoID, 28 Haymarket, London sw1, or to the CoID, Scottish Committee, 46 West George Street, Glasgow c2.

DESIGN is published for the Council of Industrial Design. The Design Centre, 28 Haymarket, London sw1 (Scottish Committee: 46 West George Street, Glasgow c2, by Her Majesty's Stationery Office K136 SO Code No. 88-1266-60-11*)



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VANITORY units



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